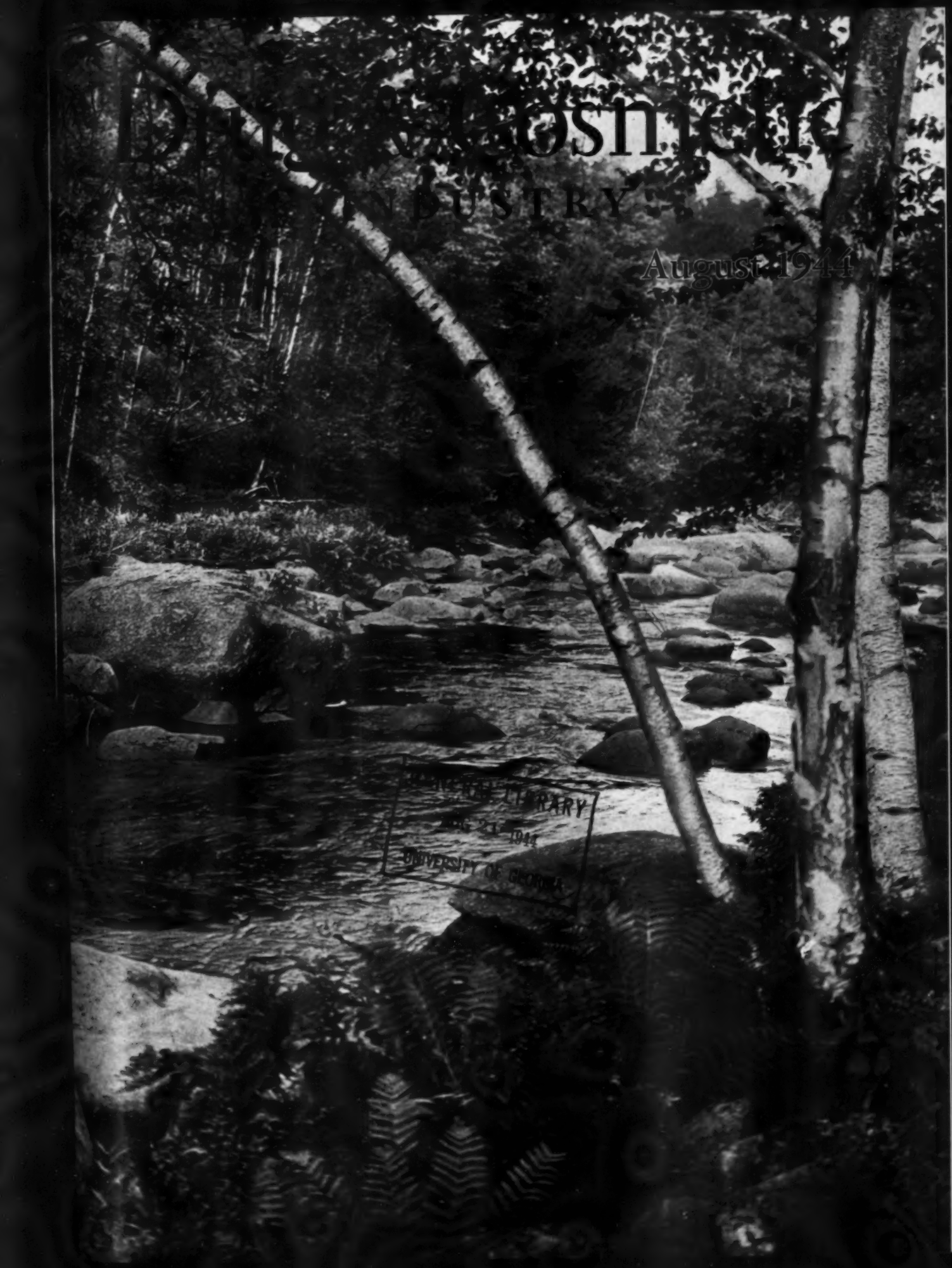
Dairy Industry

August 1944



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Drug & Cosmetic INDUSTRY

AUGUST 1944

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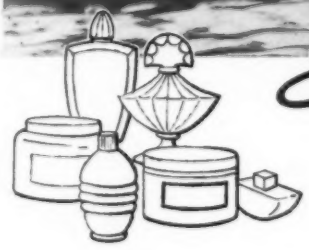

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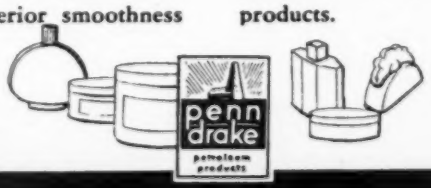

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INSIDE NEWS

AUGUST PREPARED BY NATIONAL CAN CORPORATION, NEW YORK, N. Y. 1944

ORGANIC CHEMICALS

Exports Can Absorb 10% of Post-War Output, Latin America Considered Logical Market

After twenty-five years of development, a second period of rapid growth and expansion of organic chemical industries is forecast by The U. S. Bureau of Foreign Commerce.

Pre-war, in 1937, Europe took one-third of U. S. organic chemical exports; Asia, Africa, Oceania almost a third; northern North America over a quarter; South America accounted for only a sixteenth.

The war-time picture, while distorted by Lend-Lease and other special trade conditions, indicates the ever-growing importance of the Latin-American market, a trend which can be extended into the future, owing to increasing long-term industrialization in many South American countries. The large increases in exports of coal-derived dyes, glycerin, acetic acid and acetone to Western Hemisphere markets are significant in this respect.

While the post-war picture in European, Asiatic, Australian and South African markets is still obscure, owing to unpredictable factors, such as policy towards defeated nations, influence of European cartels, etc., the Latin-American future is considered much clearer for three reasons: (1) permanent industrialization is increasing, quite apart from the war, (2) Latin-American industries will generally consume rather than produce organic chemicals, and (3) lessened competition from abroad is expected during at least the first post-war years.

Thus, practically all Latin-American countries in 1941 recorded an increase of imports from the U. S. of acetic acid, acetone, aniline, benzol, camphor, carbon tetrachloride, citric and tartaric acids, formaldehyde, methanol, hexamethylenetetramine and the phenols.

Best Latin-American Markets. Look first to Mexico, Brazil, Argentina, Chile and Peru for sales of organic chemicals. Brazilian plastic industries, for instance, are increasingly important prospects, as well as Brazil's textile industry, largest user of dyes in South America.

You may also wish to investigate the following consuming channels in Latin America: soap and candle factories, paper industries, tanneries, hat factories, bakery and dairy products, foods and beverages, cigars and cigarettes, drugs and pharmaceuticals, dry cleaning establishments, polishes, inks, perfumes, sugar and confectionery, insecticides and disinfectants, photographic supplies, smelters and concentration plants, petroleum refineries, cottonseed mills, flour mills, glass factories, rubber-goods plant, and manufacturers of iron and steel.

Germany dominated pre-war. Before the war, the major part of organic chemicals exported to Latin America were of European, and especially of German origin.

For instance, over 70% of Chile's and Peru's napthalene needs, over 50% of Brazil's and near 50% of Venezuela's were furnished by Germany, which also supplied all of Ecuador's cresylic acid requirements, and 90% of that country's acetic acid imports, 60% of Uruguay's, 90% of Chile's and 75% of Peru's. Hexamethylenetetramine imports into Latin America were also supplied principally by Germany.

Importance to domestic economy. To maintain war-expanded facilities at a rate of employment, organic chemical industries may export as much as 10% of their output, compared to the 3% exported in 1937.

European competitors have in the past taken away this business from U. S. producers, owing to the lack of personal, technical service from U. S. firms. Regular exchange of visits between manufacturers and foreign agents, adaptation of sales policies to local conditions, warehousing and stock-carrying arrangements, as well as simple friendship, will also affect the success of U. S. exporters—and, indirectly, the level of employment and prosperity here at home. 707

Fish Oil vs. Blood Pressure

Scientists have a clew through Vitamin A to a possible strange substance in fish oil having power to reduce high blood pressure. Vitamin A itself may not be the answer since when irradiation was used in tests to destroy the Vitamin A in the concentrate, the vitaminless material still effected hypertension cures on animals used in the experiments. Work is now in progress to find the mysterious compound giving the cure. 708

New Compounds from Glycerine

A growing interest in new compounds from glycerine finds research progressing on the newer derivatives including a study of preparation of dehydroxy acetone, thioglycerol, glycerol ether borates, also the ethers, glycerine formal, glycerine furfural and the chlorohydrins. Development of an improved method of preparing chlorohydrins from glycerine and sulfur monochloride has been initiated. 709

Zinc Saves Steel

Zinc has long served to protect iron and steel structures from rusting—not only as metallic coatings but also as zinc pigments in metal protective paints. Recently there have been major developments in these paints, in which zinc pigments have earned an increasingly prominent part. A booklet summary of these developments, with chief focus on primers and shop coats, finds the principles involved applying to complete systems. Illustrations and typical list of Federal and U. S. Services specifications are included. 710

Compressed Disc Cereals

Cereal discs of favorite breakfast foods, 2$\frac{11}{16}$ inches in diameter and fitting readily into the round "C" ration can, are now available in pre-cooked and pre-mixed form to the fighting soldier overseas, even those in active combat duty. These cereal discs, strong enough to be eaten dry without crumbling in the soldier's hand, are easily broken up for eating in conventional mush form. They are $\frac{11}{16}$ of an inch thick and contain about two ounces of cereal. 711

Parachute Ration

A small compact parachute emergency ration fitting into the pockets of a vest worn under a flier's parachute harness has been developed for American airmen. The ration, containing about 1100 calories, is packed in a flat metal container measuring about 5½ inches in diameter, includes four one-ounce chocolate bars, one and one-quarter ounces hard sugar candy, one ounce bar dehydrated cheese and crackers, two bouillon cubes, two sugar tablets, three cigarettes, two packages soluble coffee, four pieces chewing gum, small container of water-purification tablets, small individual can opener . . . the complete package weighing 12 ounces. Two ration packages are issued each flier in combat areas for use in event he bails out. 712

Plastics-Rubber "Wedding"

The gap between plastics and rubbers has been closed for the first time by the "marriage" of plasticized vinyl chloride resins with certain butadiene-type synthetic rubbers to effect vulcanizable blends possessing most of the best properties of each material and creating a new and valuable series of elastomers. Products in which these combinations produce unusual advantages include plating racks and tank linings where they resist the action of corrosives and heat; roll coverings where oxidation, oils and heat are encountered such as in continuous metal processing lines. The field of applications is extensive. 713

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Metal Etcher

Iron, steel or its alloys can be easily and quickly etched with the new "tool room" metal etcher, recently announced. It is especially suitable for marking tools, gauges, reamers, dies, punches, jigs, fixtures, etc. The mark is burned into the surface and is depth-controlled by etching heat and writing speed. 714

"Inside Story" On Liquid Level

A patented indicator is announced, made adaptable to 30-gallon steel drums in addition to the 55-gallon drums on which it has been successfully used for years. It tells at a glance the inside story about liquid level content of drums containing oil, solvents, etc. and avoids the danger of running short when deliveries are slow. 715

Lye Peeling Of Vegetables

Of interest to canners and dehydrators is a recent booklet on lye peeling, particularly of white and sweet potatoes and other root crops. Possible lye peeling of peaches is receiving research attention, as is the application of caustic soda to grapefruit segmentation . . . all precanning processes. 716

Sodium Pectate From Sisal

Sodium pectate, a gelatinous substance with properties similar to gum tragacanth, is being produced in the United Kingdom from sisal, in commercial quantities. 717

Lactic Acid Fog

A lactic acid fog, made by spraying lactic acid vapor, is being used in England to kill germs in the air. Germs of hospital blankets have been killed also by lactic acid vapor. The acid is vaporized by heating, also by spray in a watery solution. Both ways are effective. 718

Papaw as Preventative

Skin irritation from handling wool, prevalent in the industry in Australia, is now being prevented by a preparation using the juice of the papaw. 719

Viruses Are Proteins?

Viruses, formerly supposed to be ultramicroscopic organisms, are now considered complicated proteins, inanimate in nature, according to recent tests which show they retain their identity in the absence of all B vitamins. 720

Enzymes Potentialities

Development of penicillin has directed active research to other culture of fungi which may produce enzymes of great industrial value. Work now points to enzymes which may bring better leather goods, stronger textiles, new cheeses, turn wood into sugar and sugar into fats. 721

Technical Topics

ANTISPASMOTIC COMPOUNDS — Naphthylacetic acid amino-esters have been found to possess promising antispasmotic action in investigations carried out by a large American pharmaceutical manufacturer. In tests on isolated rabbit intestine, compounds such as the beta (N-piperidino) ethyl ester and betadiethylaminoethyl estet hydrochlorides of alpha- (a-naphthyl) butyric acid and the gammadiethylaminopropyl ester hydrochloride of phenylalphanaphthylacetic acid showed activity in dilutions of 1 to 1,000,000 and 1 to 2,000,000. 722

THIOUREA IN PROCESSING — Thiourea was found to be an effective protective agent of vitamin C during foodstuffs processing in work recently carried out in Ireland. It was found that of the simple solutes tested which might protect ascorbic acid from oxidation in the presence of copper, thiourea was outstanding, and that pharmacologically it displays none of the effects possessed by certain substituted thioureas and is thought to be excreted unchanged by the kidney. 723

WEED CONTROLS—Dinitrocresol compounds were recently suggested in Britain as effective weed control chemicals. Ammonium dinitro-orthocresol was stated to be the most effective salt of the group. A spray of dilute copper chloride solution was also declared to have been shown a good eradicating agent of numerous weeds from cereal crops. 724

COATING RESINS — Cyclohexanol and hydroxybenzoic acid are declared to form resins suitable for use in enamels and other coating compositions in a recent British patent. Small amounts of sulphuric acid catalyze the reaction, to form compounds varying from soft, sticky materials to hard, brittle resins. The products are soluble in the organic solvents normally employed in paint practice. 725

ZEIN ACETATE—Zein acetate has been found to produce films and coatings which are stronger, more flexible, and more water resistant than those employing zein alone. Acetic anhydride, glacial acetic acid, acetyl chloride, and ketene are suitable acetylating agents for zein, and catalysts such as sulphuric acid or anhydrous sodium acetate can be used to speed the reaction. 726

ANHYDROUS MINERAL ACID—Monofluorophosphoric acid is being offered commercially by an American chemical manufacturer as a new mineral acid in anhydrous form. The compound is described as an oily liquid showing some of the analytical reactions of sulphuric acid, but being non-oxidizing, contrary to concentrated sulphuric acid. 727

PROVIDE IMPERMEABILITY — Synthetic resin compositions are now being offered to close porous areas of magnesium, aluminum, and iron castings, making them impermeable to gasolines, oils, solvents and fumes. The metal impregnating resin is applied in solution in monomeric styrene under vacuum and pressure, and then baked to thermoset the resin. 728

TIN RUST COUNTERACTED—Tinplate rusting is counteracted by simple and inexpensive method recently described in a British trade journal. The treatment consists of running the tinplate through a hot oxidizing and detergent solution which forms an invisible protective film on the surface. 729

SEBACATE PLASTICIZER — Dibutyl sebacate has been found a valuable plasticizer for synthetic rubber and other elastomers employed in the war program. Principal value of the sebacate over other plasticizing agents has been its property of maintaining flexibility in the compound in which it is incorporated at sub-zero temperatures, as are found in the Arctic and at high altitudes. Many of the plastic and soft rubber materials perform satisfactorily at normal temperatures, but harden and stiffen when exposed to low temperatures. 730

NICOTINIC ACID—Nicotinic acid, constituent of Vitamin B complex, is obtained from coal tar and bone oil by a process now perfected. 731

Every effort will be made to furnish additional information on these articles. Where such information is not obtainable, we will refer inquiries to the original source of the article. Write to National Can Corporation, 110 East 42nd Street, New York City. Please mention the number at end of article—also name of the magazine you saw it in.

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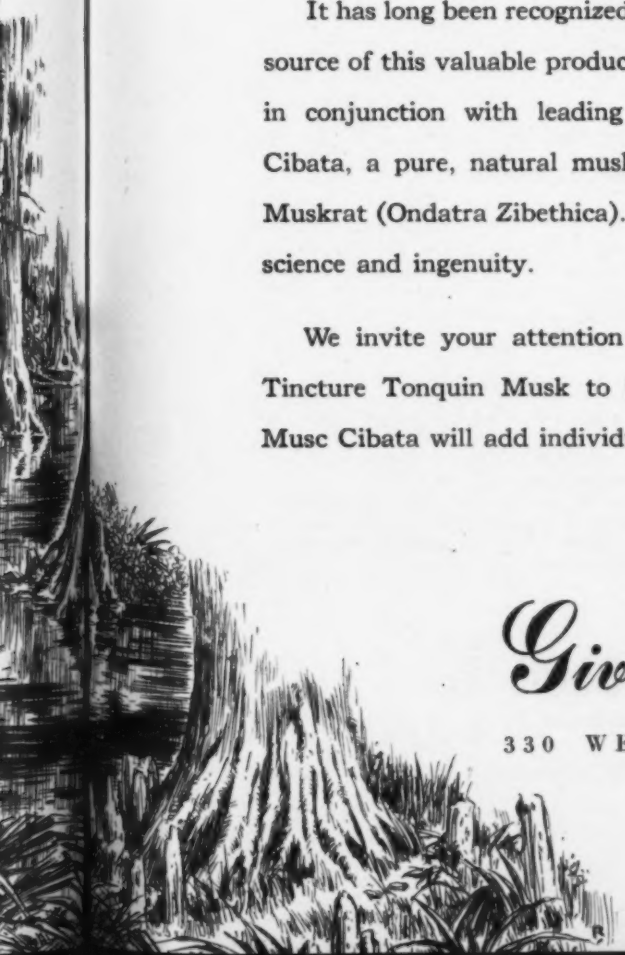

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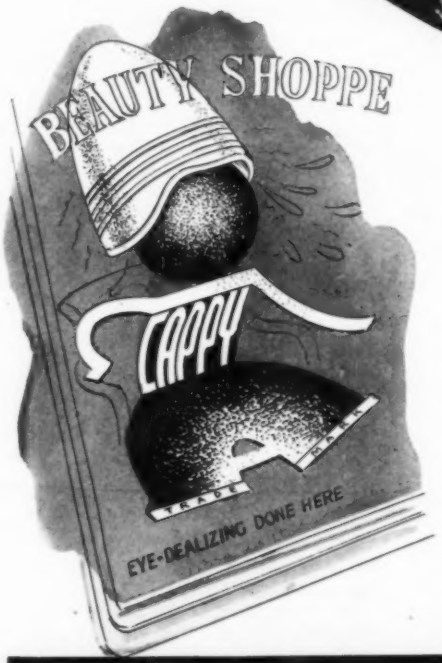

The Finishing Touch

makes a lot of difference in the impression created with new acquaintances. Your package is meeting people every day, seeking an invitation into the best homes. Encourage a bid from every shopper . . add the finishing touch to your package with appealing color, up-to-date lithography. You incur no obligation by sending a sample of your present package with a request for an ARIDOR "Eye-Dealized" Metal Cap Design Suggestion. Do it today!

The ARIDOR Co.

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what's new... CHOLINE!

Are you giving consideration to this new member of the vitamin B complex?

This new vitamin is currently the subject of much clinical research, and is rapidly gaining recognition. Recent clinical experiments with choline show promise in the alleviation of cirrhosis of the liver.

Results with experimental animals indicate that a dietary deficiency of choline produces various pathological symptoms, including fatty and cirrhotic livers, hemorrhagic kidneys and bone deformities.

Other potential uses of choline are outlined, in detail, in Calco technical literature . . . which is available upon request.

Choline is offered by Calco in two forms: (1) CHOLINE CHLORIDE, which is the most commonly used salt of choline; and (2) CHOLINE DIHYDROGEN CITRATE, which is a more recently developed form developed by Calco for pharmaceutical use.

CHOLINE DIHYDROGEN CITRATE has a pleasantly acid taste and is somewhat less hygroscopic than the chloride, consequently it is more suitable for use in pharmaceutical preparations.

New Products

Choline Chloride
Choline Dihydrogen Citrate

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Ask, Also, About These Other Available CALCO Products

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Sulfapyridine U.S.P. (and Sodium Monohydrate)
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Cinchophen N.F.
Neocinchophen U.S.P.
Sulfathiazole U.S.P. (and Sodium Monohydrate)
Mandelic Acid U.S.P.
Methylene Blue U.S.P. (Powder-Crystals)
Calcium Mandelate U.S.P.
Glutamic Acid HCL
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Pharmaceutical Department
CALCO CHEMICAL DIVISION
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Floral creation of unusual intriguing odor...suggestive of the subtle charm and mystery of the native background with an appealing character that lends delicate bouquet to toilet waters and perfumes.

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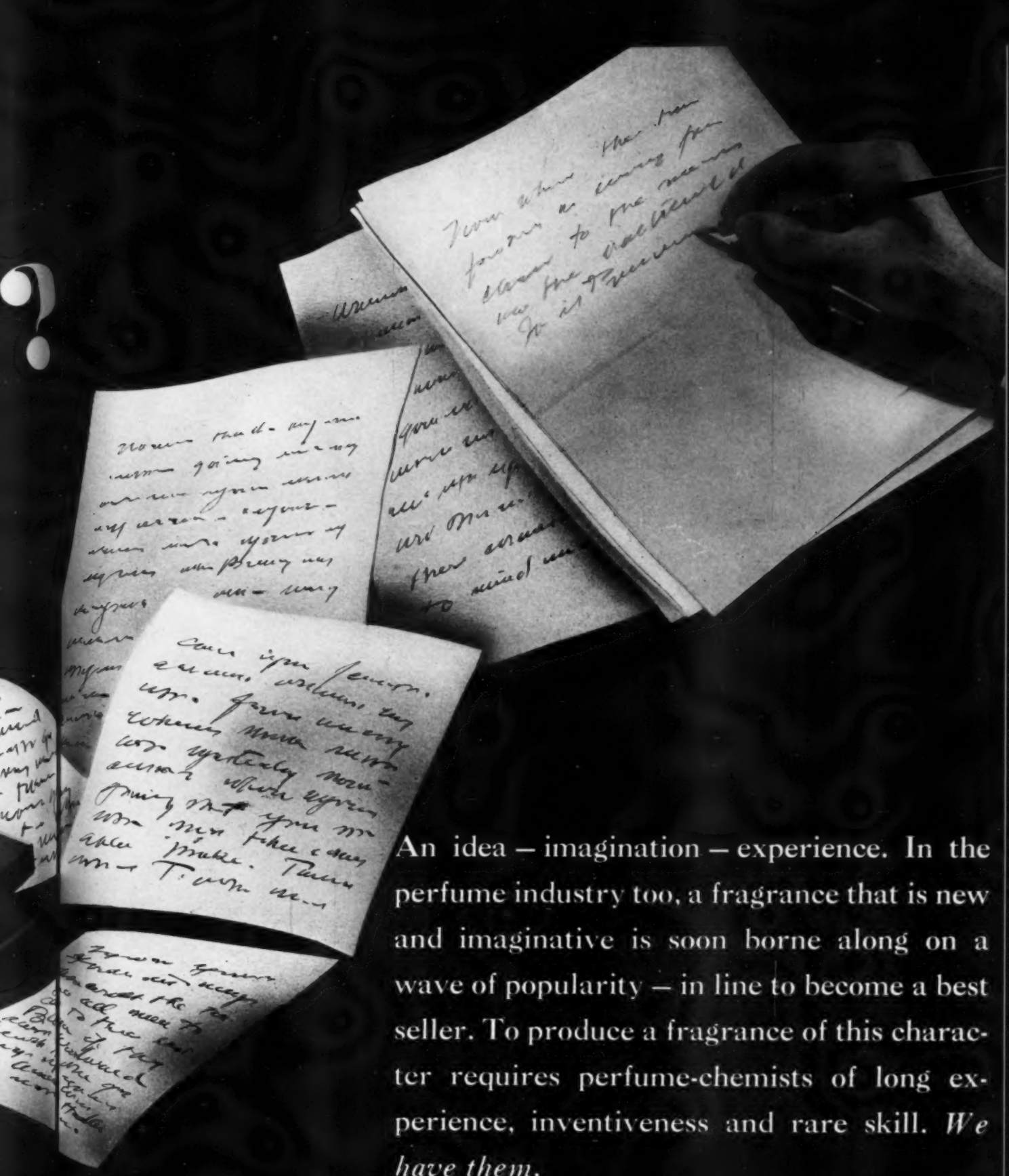
Florasynth Labs. (Canada) Ltd. — Montreal • Toronto • Vancouver • Winnipeg Florasynth Laboratories de Mexico S. A. — Mexico City

What makes a

"BEST SELLER"?



An idea – imagination – experience. In the perfume industry too, a fragrance that is new and imaginative is soon borne along on a wave of popularity – in line to become a best seller. To produce a fragrance of this character requires perfume-chemists of long experience, inventiveness and rare skill. *We have them.*

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Never far enough to lose sight of your production problems.

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E.G. Emery's 0-131 Special Olive Elaine is extremely pure, and almost colorless . . . recommended for liquid soaps when exacting specifications demand a superior raw material.

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Hooker Flake Benzoate of Soda (U.S.P. and Technical)—because of its non-dusting quality and high solubility is widely used as an antiseptic in pharmaceuticals, in medicinal preparations, in tooth pastes and powders as well as a food preservative.

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Hooker Benzoic Acid (U.S.P. and Technical)—a white crystalline powder with a melting point of 122.0°C. It is slightly soluble in water, and highly soluble in alcohol and ether. Its high purity makes it an ideal preservative for cosmetics and pharmaceuticals.

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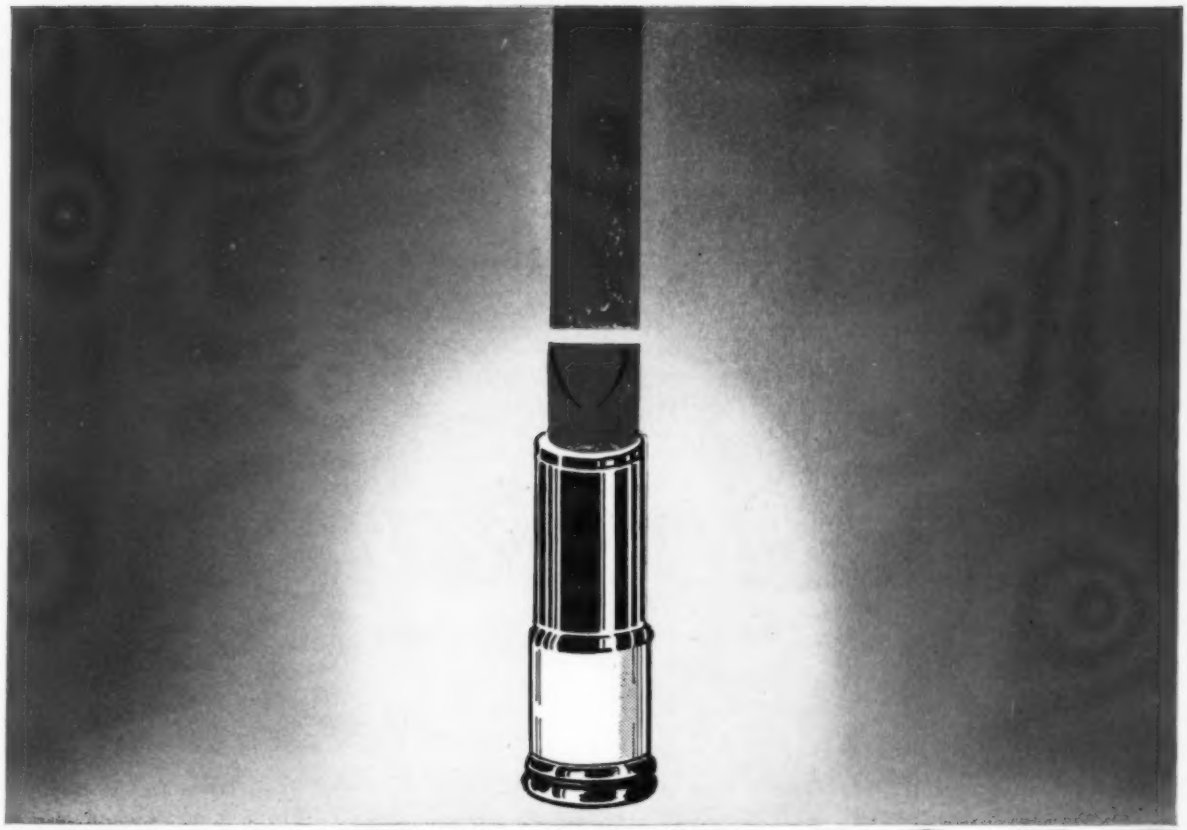

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Face Powder	Face Creams
Sachets	Lotions
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has an enviable reputation, having made a marked contribution to the success of so many perfumes, colognes and toiletries which contain alcohol.

It really removes the sharpness of alcohol odor and lets the fragrance come through.

If you aren't already using it, write us for a sample of Tonkaire and directions for use. You'll really be amazed at the results!

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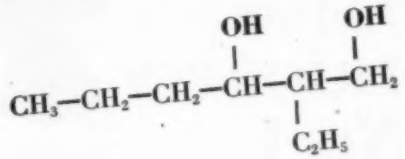
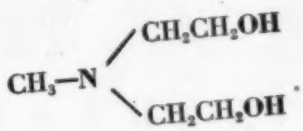
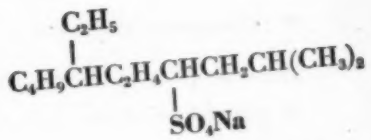
NEW CHEMICALS
from
CARBIDE AND CARBON CHEMICALS CORPORATION



The Army's insect repellent is based on Ethylhexanediol—Carbide's new glycol. This high-boiling (243°C.), non-volatile, colorless glycol is the basic ingredient of National Carbon Company's Eveready insect repellent 612. Ethylhexanediol is also a promising intermediate for making perfume fixatives, plasticizers, and synthetic resins, particularly because its derivatives are less soluble in water and more soluble in oil than those made from the lower glycols. It has probable applications in the cosmetic field since it resembles glycerin in its softening action on the skin. Except for use in insect repellents, it will probably be available only in research quantities for the duration of the war.



Methyldiethanolamine is a new amine intermediate. If you are interested in textile auxiliaries... pharmaceuticals... insecticides... emulsifying agents... or corrosion inhibitors, and if you are looking for an amine with different structure or properties, you should investigate Methyldiethanolamine. It is miscible with water and benzene, boils at 121°C. at 4 mm., and has an equivalent weight of 119. It shows some evidence of selective action in the absorption of acid gases. Methyldiethanolamine can be supplied in drum-lot quantities.



We now produce a high-purity Tergitol Penetrant 4 Paste. Especially prepared for use when a concentrated form is required, this Tergitol wetting agent contains 50 per cent sodium tetradecyl sulfate, 50 per cent water, and practically no inorganic salts or mutual solvents. Tergitol Penetrant 4 Paste shows promise in enhancing the activity of certain antiseptics and bactericides. It can be dehydrated to anhydrous form when the use requires it. Commercial quantities can be supplied.

For further information, write for the data sheets on Ethylhexanediol, Methyldiethanolamine, and Tergitol Penetrant 4 Paste.

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● Out of the MM&R research laboratory has come the perfect solution for overcoming the characteristic odor of Isopropyl Alcohol. The answer is NEUTRALIZER IA No. 1 MM&R! Specifically designed to depress and neutralize the objectionable odor of Isopropanol without distortion of subsequent additions of perfuming ingredients.

The use of this neutralizer in the suggested proportion — 1 ounce to 20 gallons of Isopropyl Alcohol — is not only economical initially, but also serves the added purpose of reducing the amount of perfume oil required to provide the odor identity common to your product.

Testing samples, suggested usage and schedule of prices immediately available.

NEUTRALIZER IA No. 1
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What's NEW at NYQ

By a "G. I. Joe" from N.Y.Q.

"Due to a mix-up in the mail (I located 14 letters yesterday) I did not receive the notice and minutes of the presentation of the ARMY-NAVY "E" until yesterday. My congratulations are therefore belated but nevertheless sincere. We G.I.'s have a great personal interest in the continued production of drugs and chemicals. From the tiny first aid kit tied to a parachute to the more elaborate field kits of the Medics; from the .... to the rows and rows of bottles in the infirmary, there is always right at hand aid and comfort from pain and suffering and always in sufficient quantities to meet our needs. This could never be an accomplished fact without the outstanding efforts of those who produce. We G.I.'s need never fear that we will suffer needless pain or disease thru any lack on the part of the men and women of N.Y.Q. in bringing aid to us. Again, congratulations and good luck."

"G. I. Joe"

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PRODUCTS MADE IN CONFORMITY WITH THE PURE FOOD, DRUG AND COSMETIC ACT
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Emulsifiers

OF QUALITY AND UNIFORMITY

NOW READILY AVAILABLE

FOR SOAPLESS, NEUTRAL AND ACID EMULSIONS

Now is the season for deodorants and leg makeup! Tie up with these finer materials for better quality, faster-selling deodorant and liquid stocking products!

TEGACID—Glyceryl Monostearate—Acid emulsifying. For greaseless anti-perspirant creams and ointments.

TEGIN P—Propylene Glycol Monostearate—Self emulsifying. For brushless shave creams, greaseless creams, lotions, ointments and cosmetic stockings.

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TEGO STEARATE—For greaseless creams, lotions and ointments.

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LANOLIN ABSORPTION BASES

PROTEGIN X—*For Nite Creams and Ointments.*

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by

S.B.PENICK & COMPANY

The purchase of Compagnie Duval, 121-123 East 24th Street, New York, by S. B. Penick & Company is announced.

The Duval Company was established in 1914, and over the years has developed an enviable reputation for high quality standards in its perfume specialties, flavor concentrates and allied products, and has successfully established its line in the export field.

The Duval personnel will continue with this company to serve its many domestic and foreign friends. Substantially enlarged facilities will enable the unit to increase its service to the varied industries using its products.

Compagnie Duval will operate as a unit of our
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Through this acquisition, in combination with our facilities in the production of botanical drugs and fine chemicals, we look forward to serving our extensive export and domestic trade fields to their better advantage.

S. B. PENICK & COMPANY

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RIBOFLAVIN 'ROCHE'

NOW

All you want — no W. P. B. allocation — Order any time — for immediate delivery

Now—for the first time since Hoffmann-La Roche pioneered in the production of riboflavin—you who want it for pharmaceutical use are permitted *both* by quantity production and by the Government to have *all* you want, *whenever* you want.

It is now the eleventh year since riboflavin (vitamin B_2 or G) was first isolated. Then, 1933, it took from 5,000-11,000 quarts of whey to yield a single gram.

In 1935, when Karrer, collaborating with the Hoffmann-La Roche Scientific Laboratories, announced the first synthesis of riboflavin, the first gram cost $2,500. Commercial production seemed a baffling problem.

Nutritional data, too, were slow in accumulating. Pure crystalline riboflavin (made from liver) was experimentally used in animal feed in 1935. Later, reports began to tell of its growth-promoting properties. In 1938, deficiency symptoms in chicks were described, evidence given that the vitamin could prevent them. Different groups of scientists reported also on hatchability studies. Still later, reports began to establish the precise percentages of riboflavin for various types of feeds and food products.

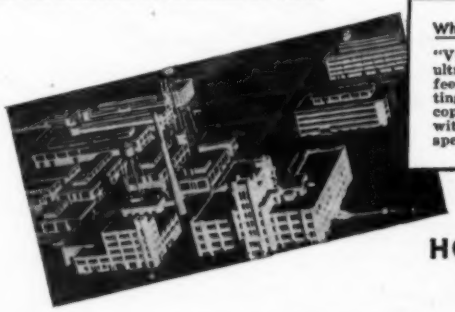
By 1940, date of the Food and Drug Administration's first hearing to consider the addition of vitamins to white flour, nutritionists were convinced that riboflavin deficiency was widespread among our human population, so agreement was reached that it should be included with the other enrichment ingredients.

But it was not till 1941 that the persistence and skill of Roche chemists solved—after 6 years—the problem of industrial production on a scale making possible present-day quantities—at favorable prices.

Large new riboflavin units at Roche Park came into operation in 1943, and pushed production to new peaks. Then, April 1, 1943, the War Production Board issued General Preference Order No. M-299 placing all riboflavin on allocation.

Now, **however—as of June 20, 1944—no W.P.B. application is needed. You need not even plan your orders ahead as you have been doing. You are free to order all you want, for immediate delivery, whenever you want it.**

And now Hoffmann-La Roche, proud of the part it has been able to play in all this, renews its pledge to you: to produce the finest possible; to do so at the lowest prices consistent with the highest quality.



Why you should specify 'Roche'

"Vitamins by the tons" pour in a steady stream from this ultra-modern scientific plant, to meet military, civilian and feed requirements of America and her Allies. Unremittingly every "batch" must not only fulfill U. S. Pharmacopoeia requirements, but also rigid specifications developed within our own laboratories, still pioneering. When you specify 'Roche'—B_1, B_2, or C—you specify "the finest"!

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Vitamin Division • Nutley 10, N. J.

The Mark of Merit in
COLD PERMANENT WAVES

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TYO—*Gem of the Lotions!*

IF you want a cold wave solution that's SUPERIOR—be sure it's made with genuine TYO — the original basic ingredient. Whether you are a maker or a buyer, you'll want your cold wave lotion to contain TYO (U. S. Patent #406038); for TYO assures you purity, unfailing quality, and protection. Many have tried to imitate TYO QUALITY; none can equal TYO's salon-tested superior properties:

- ★ *has no unpleasant odors*
- ★ *works faster, simpler, better*
- ★ *produces positive results on ALL types of hair*

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Depilatory powders, ready for positive results with just the addition of water.

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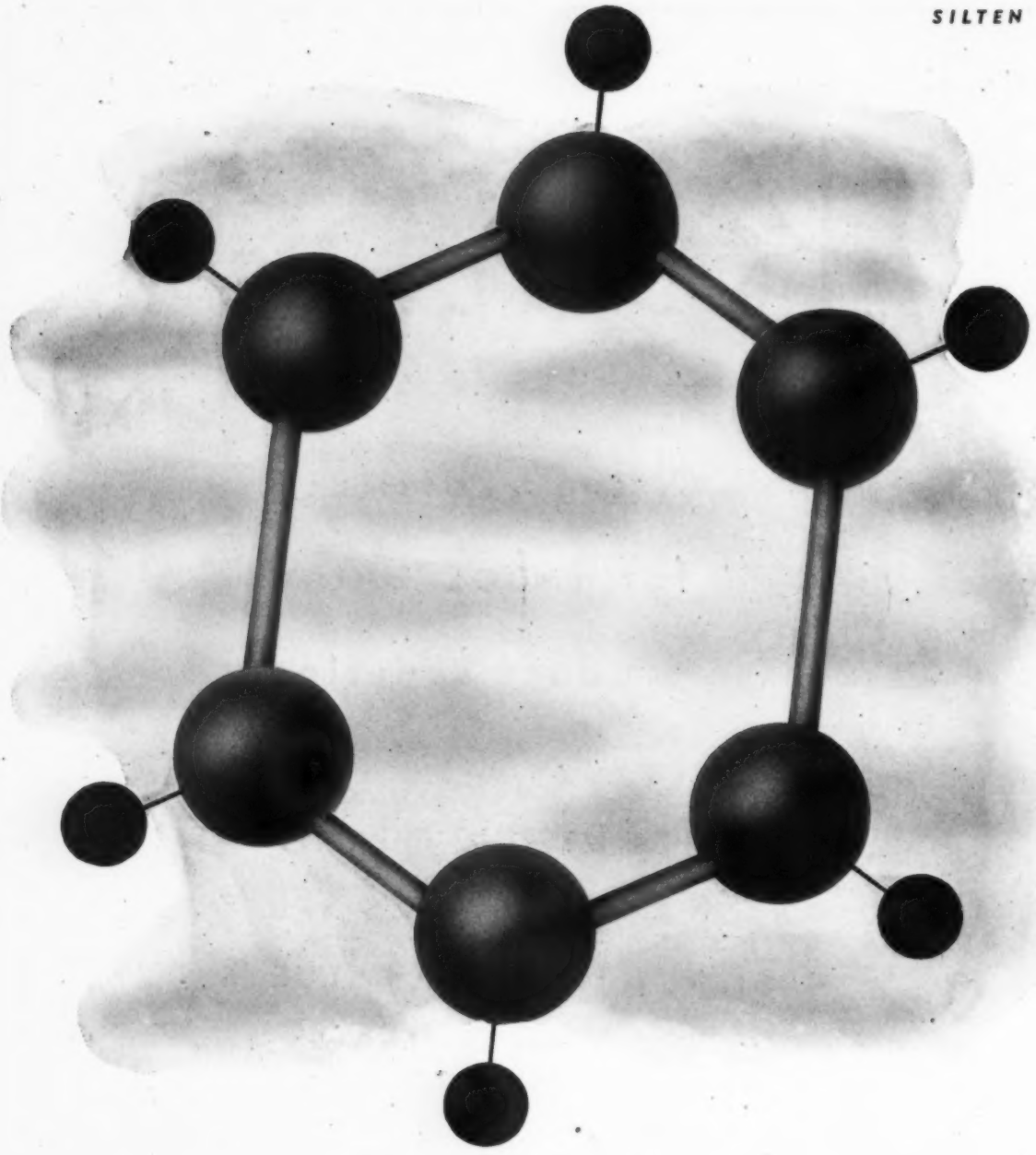

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the *scientifically* developed synthetic Bergamot oil

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Parmantheme

A truly remarkable synthetic version of the natural Parma-Violet note!

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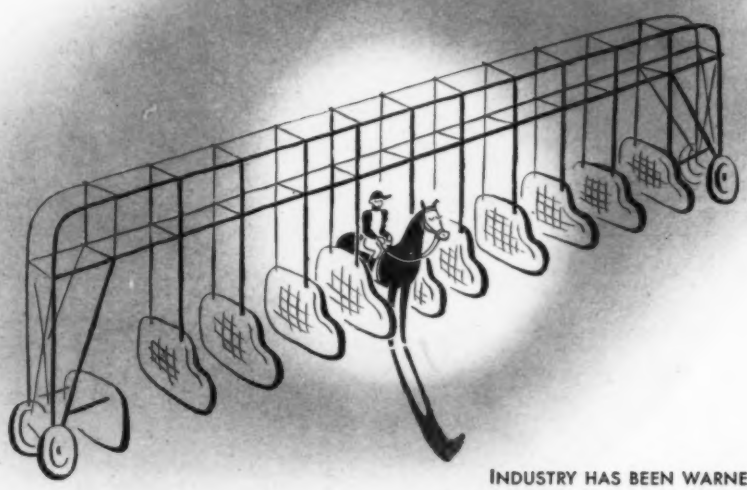
DON'T BE LEFT AT THE POST-WAR PLANNING



INDUSTRY HAS BEEN WARNED by Jesse Jones, U. S. Secretary of Commerce, that the war may end suddenly and business should, therefore, be preparing now for the Post-war period.

The Committee for Economic Development reports that cessation of hostilities in Europe will release 80% of the nation's war production capacity for reconversion for civilian use.

Mr. Jones' warning and the report of the Committee for Economic Development should serve as a double spur to all Post-war thinking. When restrictions are lifted from war-prioritied cosmetic ingredients, don't be caught flat-footed and left at the post.

The merchandising, packaging and production experience and facilities of Allied Products may be a source of guidance at this time for the all-important, fast get-away and quick sales pick-up when war production barriers are raised. Arrangements for consultation can be made at your convenience, and without obligation, at your office or at the Allied Office in the R.C.A. Building in New York City.

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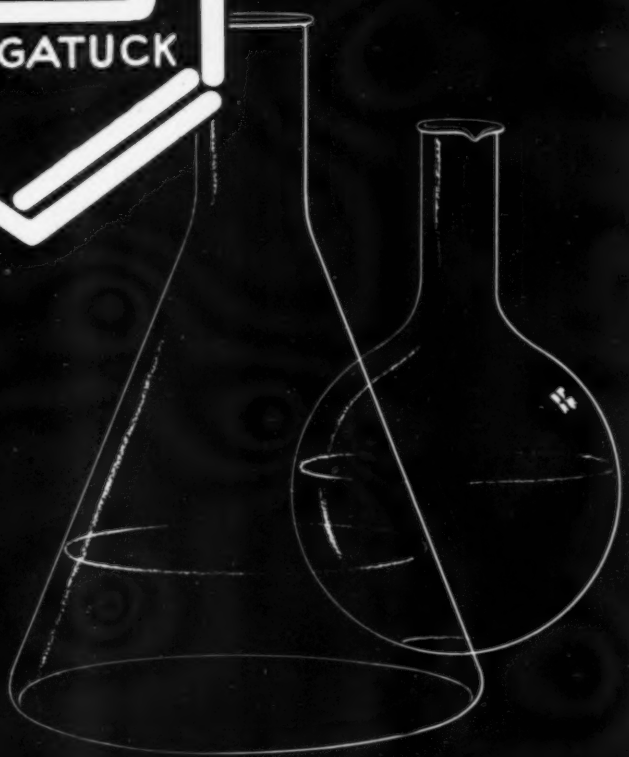

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POST-WAR PLANNING

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Much of our resources continue to be dedicated to the important production of war essentials. But whatever your post-war manufacturing, packaging or merchandising plans may be, EVANS CHEMETICS service is at your disposal. We are prepared to follow through for you on any new ideas you may have, today and in the years to come.

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Search for the Elixir of Life

AN ELIXIR of sulfur and mercury, taken twice monthly is said to have prolonged the life of the medieval Jainas priests in Southern India to some 150 or 200 years. However, when the Persian Ruler Ilkhan Arghun tried the same recipe, he died within eight months.

This strange Indian custom originated in the Mediterranean area. Greek and Arabian alchemists thought that sulfur and mercury were the basic substances of all metals. Metals gave strength and vigor which prolonged life.

Sulfur and mercury continued to play an important role in chemistry and medicine throughout the Middle Ages and Renaissance as well as in modern times. Mercury salts such as calomel have been widely-used remedies since the 16th century. Similarly, sulfuric acid was known to the alchemists, but not until John Roebuck, in the latter part of the 18th century, devised a method of manufacturing it in lead vessels, was the door opened for the vast industrial use of sulfuric acid, sulfates and sulfites.

For 77 years the MALLINCKRODT CHEMICAL WORKS have been pioneers in the manufacture of such sulphur compounds as Ammonium, Calcium, Potassium and Sodium Sulfites; Metabisulfites; and Bisulfites. And over 40 Mercury salts including Calomel, Corrosive Sublimate, Cyanide, Iodide, and Oxides. The MALLINCKRODT trademark is your assurance of receiving chemicals that meet your most exacting requirements.

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"The boss says that male sex hormones should go big due to the manpower shortage."

KEEPING POSTED

Socialized Medicine Forecast

UNDER the title of "The Doctors," on July 31, the New York "Daily News" published a double column article by Frank C. Waldrop from Washington. The article spoke of the Wagner-Murray-Dingel Bill which is "ninety pages long, and containing roughly 17,000 words, that makes the doctors of America shiver." To quote some pertinent paragraphs from the article:

"In brief, the entire basic system of medical practice in America will be governed by the head of one Federal bureau in Washington if the bill goes through. And some clever maneuvers have been started to blast it through at the psychologic moment.

"For instance, have you had trouble getting a doctor, lately? America is so short on civilian physicians that the house of delegates of the American Medical Association warns that an epidemic of influenza or similar disease would sweep the country in devastating fashion. The doctors just can't get around to their patients now, and in a few years, things will be worse, according to the AMA.

"Britain, Canada, and Russia, looking ahead to the troubles of post-war readjustment, are enlarging their system of medical training now, war or no war.

"But Mr. Roosevelt, in his infinite wisdom, is working in exactly the opposite direction. The overworked older doctors of America are dying at the rate of 4,000 a year. They are being replaced at the rate of only 1,500 a year—because F. D. R. has decreed that no pre-medical students shall be deferred from the draft. By 1948, end of term IV, if any, the effect of this policy would leave the U. S. with 10,000 fewer doctors than it has today.

"The house of delegates of the AMA has begged Mr. Roosevelt to think twice about this, and warned him that the result will be a critical loss for the private practice of medicine in the post-war era when care for veterans will in itself be a gigantic assignment and the world demand for American medical skill will hit us.

"There just won't be enough young doctors to fill the ranks as the older men die, they show by simple mathematics. But there will be a 'crisis,' and an 'emergency.' And then, the political geniuses can spring the Wagner-Murray beartrap at the moment when the country's desperation for medical attention will be at its peak.

"The doctors can beat him at his game only by tossing all their crooks and quacks out of their medical societies, by showing they care more for their patients' welfare than for their elaborate 'ethical' protection of doctors who have double-dealt with the public.

"They have a heavy policing job to do in their own ranks if they expect to stand with them against the Wagner-Murray juggernaut, and without the public on their side it will crush, for sure."

Penicillin Price Cut Again

THE price at which penicillin is being sold to the Government is repeatedly being cut by Chas. Pfizer & Company, who are at the present time the world's largest producers of the drug. Recent cuts in price made by Pfizer were from $2.20 to $1.90 per 100,000 units in June, and then to $1.60 for the same quantity in July. Since the company is now producing the drug at the rate of 70 billion units per month, the monthly sales of this one product at the new low price is $1,120,000. The company confidently anticipates increasing production of penicillin to 100 billion units without expanding present plant facilities. Since it was stated last month that the Government is still paying some manufacturers $8.00 per 100,000 units of penicillin, it seems that in the case of penicillin Pfizer is going to follow its usual custom of lowering the price as rapidly as economies brought about by expanding volume and by amoritzation will permit.

It will be recalled that Pfizer followed this policy for a long time after it started manufacture of citric acid by fermentation of sugar. From a price of 46 cents per pound, Pfizer, over a period of years, brought the price down to its present level of 21 cents per pound. And the price has remained at 21 cents per pound even though the cost of molasses has risen to $46 per ton from a former price range of $18 to $22 per ton. Pfizer followed a similar policy of lowering the price and thus passing on economies to the consumer in the case of ascorbic acid, riboflavin, and other items.

Dr. Parran Gives Medical Plan

IN TESTIFYING before Senator Pepper's sub-committee on Wartime Health Education, Surgeon General of the U. S. Public Health Service, Dr. Thomas Parran proposed for the country as a whole the plan used by the Army in this war. A soldier who is wounded in battle or who falls ill is taken immediately to a field hospital where he receives preliminary treatment and his case is diagnosed and classified. Then he is transported to a base hospital for such further surgical or medical attention as he may need.

Dr. Parran would have a similar organization for civilians. He would establish outlying clinics in sparsely populated areas, hospitals back of these and base medical centers in the States, with the sick transferred from one to the other as diseases or injuries required. In addition, these clinics, hospitals, and medical centers would serve as teaching institutions for family physicians who are practicing in outmoded ways because there are no local consultants or laboratories to aid them. Thus Dr. Parran would weave the great hospitals and schools of the large cities and the remote country clinics into a single fabric, grants from the Federal Government enabling the poorer States to forge their own links in this medical chain.

Thus with the motor-ambulances and automobiles, physicians practicing in small communities would be able to transport patients needing special care to the nearest clinic or hospital. Patients being treated at home would also benefit since their physicians would have the diagnostic aid of a local hospital laboratory which is not available in many rural districts at the present time.

Dr. Parran's plan does not anticipate the abolition of private practice but would supplement it in such a way that it would really be strengthened. There is no doubt in anyone's mind—even in Dr. Fishbein's—that aid from the Federal Government is necessary in some areas of the country if we are to have adequate medical facilities. The availability of modern methods of diagnosis, of hospital, surgical and medical services, and of continued education for the doctor, is the one thing that is causing so much complaint about the medical practice available in this country.

There is only one large fly in the ointment. That is that a very large majority of the doctors of this country will have to lose the fear of losing their patients if they send them to other doctors for special treatment.

A Swift Moving Industry

IT HAS been figured out that the turnover in the drug products which the drug stores of this country have for sale was 28 years relatively few years back, but now has shortened to 25 years. By this turnover is meant theoretically that within a space of 25 years, the medicines offered for sale in a drug store would be completely replaced by newer items. The drug manufacturing business is one that moves fast in this replacement of current drugs by newly discovered items, and the pace is becoming swifter. As a recent example, it is only a few years ago that serums for pneumonia were being widely used and were steadily increasing in demand. Manufacturers had large laboratories devoted to the production of the serum. Large colonies of rabbits were maintained for the purpose of developing the serum. Then along came sulfathiazole and the pneumonia serums were a thing of the past. Now along comes penicillin and the sulfas are becoming things of the past for certain uses one of which is pneumonia.

Naturally it is most important under such conditions that a drug manufacturer keep his ear close to the ground and be ready to enter the manufacturing and marketing of any new product that holds out promise of becoming an important item. And a manufacturer cannot help taking on a few that do not develop as promised, and he cannot help missing the boat on some which do develop despite the manufacturer's opinion to the contrary. However, there is one thing of which a manufacturer can be certain, if he attempts to ride his business solely on the items that he has had for a period of years, it will soon dwindle and he will eventually go out of business.

In fact this is one of the reasons for the present wave of expansion and diversification through acquisition of other companies. The post-war picture is so cloudy and things are moving so fast that no one knows just where he will stand. But his doubt of the future is much greater if he has only a few products which he has had for a number of years.

The Unemployment Problem

WE OFTEN wonder how the situation of unemployment is going to be handled when the war demand ceases. Everyone is supposed to take on extra help and thus relieve the situation. Small retailers who run practically one-man stores, are supposed to take on someone extra, and large corporations are supposed to take on a considerable number of extra employees. How the small retailer is going to support an extra man is beyond us, and how long he is going to pay out good money for someone that only gets in his way, we do not comprehend. But beyond this, we wonder how long stockholders are going to stand for boards of directors or managements that pay out the stockholders' money for people who are quite unnecessary. The problem is not nearly so simple as many would have us believe.

Alcohol Restrictions Eased

COSMETIC manufacturers have been given a "break" by the WPB in the matter of alcohol. Not that the quantity that they will get is to be increased, but they are to be permitted to anticipate in the third quarter of this calendar year, up to 50 per cent of their fourth-quarter quota for alcohol under Order M-30. WPB says that the reason for this is to allow manufacturers to utilize the seasonable labor available during the Summer months. But beyond this, manufacturers will be able to get a large part of their Christmas merchandise manufactured at an earlier date and thus they will be able to reduce the alcohol consumption hump that usually occurs in the last quarter.

To take advantage of this opportunity manufacturers must make application on form WPB-2945, showing their fourth-quarter consumption.

Medicine and the Republicans

THE platform of the Republican Party drafted at the recent National Convention which resulted in the nomination of Governor Dewey for president, contains the following plank with regard to essential medical aid: "We pledge our support of the following: . . . . the stimulation by Federal aid of State plans to make medical and hospital service available to those in need without disturbing doctor-patient relationship or socializing medicine." This pledge expresses the view of Governor Dewey, since he has appointed a New York commission to recommend a state law for essential medical aid.

The Democratic Party platform drafted at the National Convention which resulted in the renomination of President Roosevelt, does not touch on the subject of essential medical aid specifically. Instead it covers the subject of such social and humanitarian projects in a broad way in a single statement covering all.

Dermerol Under Narcotic Laws

THE Winthrop Chemical Company product isonipecaine, sold under the trade-mark "Demerol" has been brought under the provisions of the Federal narcotic laws. This is the product which Winthrop introduced a while back as a replacement for morphine, certain advantages over the opium derivative being claimed for the new product. Now all transactions involving Dermerol must be made pursuant to official narcotic order forms or prescriptions and must be reported in monthly narcotic returns in the same manner as opium, coca leaves, and their derivatives. Also the requirements in regard to safeguarding narcotic drugs will also apply to Dermerol.

Government Cuts its Own Paper

BOY, Oh Boy! We never thought it would happen, but it did. A limitation order has been issued restricting government use of paper to 75 per cent of the use during the year ended June 30, 1942. Since this order is issued by the Federal Government, it can only be enforced against use of paper by the Federal Government since the States are still sovereign, and the Federal Government cannot control them in this manner. Therefore, while the order is supposed to control not only the Federal Government, but also State, County, Municipal, and local governments in their use of paper, the Federal Government can only request the States or subdivisions of States to comply with the terms of the order. If these other governments do not want to comply, they do not have to do so.

More DDT Manufacturers

MANUFACTURING facilities for production of DDT, the justly famous insecticide which is being used in huge quantities by our Armed forces, are being further increased. Originally introduced into this country by Geigy Company and made in the Cincinnati Chemical Company plant of that company, production was also undertaken by Merck, DuPont, and Hercules Powder. Now at least two additional companies are undertaking production of the chemical, namely Monsanto and American Home Products Company.

Berge Sees Socialized Medicine

ON THE subject of socialized medicine, U.S. Assistant Attorney General Wendell Berge is quite outspoken. In a recent address before the American Urological Association he urged that conditions be changed so "that once again medicine shall be available to all in need and charges shall be graduated in accordance with the ability to pay." Mr. Berge stated that physicians in service "have become aware of the tremendous possibilities which inhere in a medicine directly organized to perform its function." He further stated: "The course of events moves fast and to me a new medical order is inevitable. My fear is not that we will not get it—an awakened public, sparked by our veterans, will see to that. My fear is that we will not bring to its creation all the knowledge, wisdom, understanding we possess. A reference to the Wagner-Murray-Dingle Bill will make my point. About its intent and objectives there can be for me no dispute. Its detail of provisions, however, may or may not fall short of its purpose—I do not know. In respect to the necessity of distributing the cost of protection against ills, I am wholly convinced, and I think the American people are adamant."

Mr. Berge expressed the opinion that if doctors oppose this organization of medicine the layman would create a medical order which might prove to be indifferent or even blind to the values the doctors most highly prize. He urged that they cooperate in its creation, and he commented on that problem as follows:

"The form of organization may follow an agency of state, the university pattern, the hospital set-up, or a combination of devices from all three of these. The government may dominate the system, become one of a number of parties to its management, or be excluded from it altogether. The venture may fall into the legal form of a Public Health Authority, a non-profit-making corporation, a series of independent or inter-locking corporations, a group of consumer cooperatives, a mutual association of the profession and the laity, or still something else. Its direction may be lodged with a tripartite board, representing the Government, the public, and the profession; or the public and the profession free from Government interference may assume joint responsibility. It may or may not be state medicine; it cannot escape being social medicine."

Many Foot Ailments

FOOT ailments loom large in industrial illness, being responsible for 40 per cent of such illnesses, according to Dr. Raymond V. Healy, president of the New York State Podiatry Society. A significant relationship was shown to exist between industrial absenteeism and foot ailments. Among 2,000 Waves recently examined at the U. S. Training School at Hunter College, New York, only 15 per cent had normal feet.

Expanding for Post-war

THINGS are moving extremely fast in these days of war, high taxes, post-war planning, and whatnot. Perhaps the greatest activity is in the search for new products to manufacture and market, and part of this search is for established companies to purchase. Chemical companies are moving into drugs and cosmetics, drug and cosmetic companies are moving into chemicals, foods, insecticides and other fields, food companies are moving into drugs and cosmetics, and soap companies are also moving into drugs and cosmetics. It is a dizzy whirl that is moving at swifter rate than that which preceded the crash of 1929. When the post-war competition comes, the fire and smoke of the industrial competition is going to be greater than ever before.

Post-war Planning

POST-WAR planning in the drug, chemical, and cosmetic industries does not seem to warrant much attention from many of the men directing the sales of these companies. After all these industries have no problem of reconversion because they never converted to manufacture for war, they merely expanded their facilities. So the principal problem is one of contraction or of attempting to find markets for their expanded production. And the finding of markets sufficient to utilize the greater part of the expanded production is far beyond their own power. How anyone is going to find a market for 10,000,000 pounds of sulfa drugs when this year's production is already cut back to 7,000,000 pounds in the face of intensive war conditions, is something that cannot be answered. How 21 manufacturers are going to remain in the business of producing penicillin with relatively few of them producing at capacity at the present time although full war needs and an increasing percentage of civilian needs are being met with this restricted production also seeks an answer that cannot be easily supplied. Furthermore, the prices which the Government is paying for penicillin from different manufacturers vary all over the lot. In addition, DDT is now attracting a steadily increasing number of manufacturers as Government demands mount. When the war is over this product will doubtless find a large market but demand will be sharply lower than it is at the present, and the original producer will then enforce his patent rights and the other manufacturers will either have to operate under patent licenses or abandon manufacture of the product.

In ordinary times, as in war, the drug, chemical, and cosmetic companies operate in the same manner. That is, they manufacture the products for which there is a demand. The drug companies are largely dependent upon the health of the nation, and the cosmetic manufacturers are dependent upon the whims of the women of the country. The chemical manufacturers are dependent upon the demands of the various industries who consume their products. All that chemical manufacturers can do is to conduct research in the production of new chemicals, or of old chemicals by cheaper methods, and then try to find markets to consume them. As Willard Gibbs Medalist George O. Curme, Jr. recently said: "The party with a problem to be solved, if he is chemically informed and therefore familiar with the requirements, is in the best position to evaluate the usefulness of a new product for his purpose; the party who has a new product on hand, but has no specialized knowledge of what uses need to be served, is in a disadvantageous position to find the best application of his material."

So far the drug, cosmetic, and chemical industries, post-war planning is no different than planning for any other future period. These manufacturers can only try to keep themselves well posted regarding probable future demand for the products which they do and can produce, and attempt to lay plans to capture a substantial part of that demand.

Penicillin Situation

THIS country is now producing about 95 per cent of the world's supply of penicillin. Last month WPB announced that they had arranged for export of one billion units of the drug to other American republics, and plans are now in progress through FEA offices for a restricted world-wide distribution for civilian use. This is the first time that penicillin has been allotted to foreign nations except in emergency cases. However, less than one per cent has been allocated for use abroad under the new program.

More Glass Containers and Closures

THE glass container and closure situation for drug products has improved greatly so far as WPB restrictions are concerned. The use of glass containers for drug products is in most instances unlimited. Aluminum and blackplate rejects are now quota-free, whatever the product. Some restrictions still exist with regard to prime blackplate and tinplate. Last March, aluminum was authorized on a quota basis to pack products for which aluminum was used in 1939, 1940, or 1941. Now aluminum can be used for any glass-packed product, and adherence to any qouta is not necessary.

Increased production has resulted from standardization of glass container types, and production this year is expected to total 106,000,000 gross, as compared with 93,000,000 produced in 1943. Standardization of types will continue.

As examples, unlimited use of glass containers is permitted for tooth powder, oral antiseptics, ointments, laxatives, and related items. Most of these items were previously limited to 100 per cent of 1943 use of glass containers and closures. Further, the small user's quota is increased from $500 worth of glass and an equal number of closures to seal this glass to $2,500 worth of glass containers and closures combined. Of this $2,500, not more than $1,000 may be used for the purchase of closures.

Vitamin Oil Blending Restricted

OPA has taken action against the practice of the blending of low potency fish oils with vitamin concentrates, which practice, says OPA, has brought about a gradual disappearance of medium-range potencies of vitamin A oils used in pharmaceutical preparations. OPA contends that the blending practice was indulged in for the purpose of obtaining more money for the blend than would be realized if the oil and the concentrate were sold separately. Sellers who wish to continue blending must file applications with the OPA national office showing the potency and number of U. S. P. units in the blend together with the necessity of offering such a blend for sale.

Uses of Penicillin

THE Council on Pharmacy and Chemistry of the American Medical Association states that penicillin is effective in all staphylococcic infections such as: acute osteomylitis, carbuncles—soft tissue abscesses, meningitis, cavernous or lateral sinus thrombosis, pneumonia—empyema, carbuncle of kidney, wound infections; All cases of clostridial infections, such as: gas gangrene and malignant edema; All hemolytic streptococcic infections with bacteremia and all serious local infections, such as: cellulitis, mastoiditis with intracranial complications, i.e. meningitis, sinus thrombosis, etc., pneumonia and empyema, puerperal sepsis, peritonitis; All anaerobic streptococcic infections, such as puerperal sepsis; All pneumococcic infections of the meninges, pleura, and endocardium; All cases of sulfonamide resistant pneumococicce pneumonia; All gonococcic infections complicated by arthritis, ophthalmia, endocarditis, peritonitis, or epididymitis; Also cases of sulfonamide resistant gonorrhea; All meningococcic infections not responding to the sulfonamides.

The Council states that penicillin is not effective for: All gram-negative bacillary infections, such as: typhoid—paratyphoid, dysentery, escherichia coli, haemophilus influenzae, proteus vulgaris, baccilus pyocyaneus, brucella melitensis (undulant fever), tularemia, Friedlander's bacillus; tuberculosis; toxoplasmosis; histoplasmosis; acute rheumatic fever; lupus erythematosis disseminatus; infectious mononucleosis; pemphigus; Hodgkin's disease; acute and chronic leukemia; ulcerative colitis; coccidioidomycosis; malaria; poliomeylitis; blastomycosis; nonspecific iritis and uvetis; monilasis.

Mr. Dinkelpopper, president of the Smoothie Medicine Co., shows his staff the pill that is to be produced as a result of his post-war planning.

Vitamins and the Drug Stores

THE battle on the part of pharmacy to restrict the sale of vitamin preparations to the drug stores of the country is waxing hotter as the pharmacists make greater gains such as a recent decision in their favor by Attorney General Goldstein of New York State. The conservative New York "Times" commented on the Goldstein definition of vitamins as drugs, which definition he based upon the fact that vitamins are in the U.S.P. Said the "Times":

"A very useful and necessary compilation is this work (U.S.P.), but no more a scientific authority than a catalogue, inasmuch as it lists about everything that a druggist is supposed to carry in his pharmaceutical stock. If the Pharmacopoeia is to be taken as a scientific authority, we shall have to accept sugar, gelatin, salt, some fats, yeast, starches, and other common products as drugs. Even Attorney General Goldstein's definition of drugs as 'articles intended for use in the diagnosis, cure, mitigation, treatment or prevention of disease in man or other animals' is no help to us in defining vitamins, for it covers about everything from nitroglycerin to mineral oil, from a mustard plaster to surgical gauze. Nor is he on safe ground when he thinks of vitamins as concentrates. Butter is a concentrate of milk fat, and sugar is a crystallized concentrate of cane juice."

Dr. Cullen, of the Proprietary Association calls attention to the following fact: "Vitamins are primarily foods, in the preventive field. The same can be said for milk. I wonder, therefore, if the various State Attorney Generals would rule that powdered milk, which is a concentrate, is a drug. Milk is of value in preventing malnutrition. The vitamins are of value in preventing certain vitamin deficiency diseases."

The best opinions on the subject are along the lines of labeling and advertising. It is felt that if the State restriction on the sale of vitamins to drug stores cannot be upset, then the label and advertising statements must avoid any reference to the treatment, mitigation, or cure of disease, and stress only the preventive angle. There certainly can be no objection to food products being advertised and labeled as aids in preventing diseases resulting from the consumption of a faulty diet. Any number of food products are sold on these claims. The fact that most vitamin products are concentrates is an angle that it is believed can be overcome, especially for those products which supply only the minimum daily requirements of the various vitamins as established by scientific research.

Meetings of the Industry

BECAUSE of the request of the ODT that all meetings and conferences be abandoned due to the shortage of transportation facilities, the Toilet Goods Association has abandoned its mid-year meeting of the Scientific Section of the Association which was to have been held in New York in December next. However, the Proprietary Association is continuing with its plans to hold the mid-year meeting of its Scientific Section in New York in December, while there has been no announcement cancelling the mid-year meeting of the American Pharmaceutical Manufacturers Association scheduled for December in New York. Furthermore, the N.W.D.A. and A.C.S. are holding their meetings in New York in September.

The Vitamin Market--
And Its Probable Future

THE vitamin market has been pictured in an unfavorable light by many doctors and also by many writers. The doctors should know better and the writers would know better if they undertook to investigate the facts surrounding this meritorious group of drug products. In the first place the manufacturing and selling of vitamins has been described on many occasions as a "racket." Charges are repeatedly made that the public is being defrauded by high pressure promotion of vitamin products which most people take, although they do not need them. None other than Dr. Morris Fishbein, editor of the "Journal of the American Medical Association," and spokesman for organized medicine, has compared them to the tonics of a bygone era—products which were promoted through the most blatant forms of consumer advertising largely by use of the old testimonial technique.

However, what these people do not seem to realize is that vitamin products are the result of scientific investigation, and that the use of them is based upon sound clinical data. These products are as different from the tonics of old as day is from night. And the results of their use are apparent upon all sides. Remember that the first vitamins to come to the attention of the medical profession were vitamins A and D as they are found in cod liver oil. Cold liver oil had been used empirically for a long stretch of years, but it was not until U. S. P. X was published in 1925 that any official recognition was given to any vitamin. And the only recognition given in this edition was an assay for vitamin A content of cod liver oil and the requirement that cod liver oil should contain at least 50 units per gram. There was no recognition in this compendium of vitamin D, the one thing in cod liver oil that was to be responsible for the complete eradication of rickets from the children of future generations.

At that time there was practically no recognition of vitamin B, and its various factors were totally unknown. Vitamin B_1, now known and synthesized as thiamine hydrochloride, was completely unknown, and the dis-

ease of beri-beri, and other conditions for which thiamine is specific treatment, could not be properly treated to effect a cure. Vitamin B_2, or riboflavin, was likewise unknown and so there was no known treatment for pellagra, a disease which was rampant throughout the Southern States of this nation. Likewise vitamin C, or ascorbic acid, was unknown and there was no specific treatment for the dread disease of scurvy. Other vitamin B factors which are and will prove of great value in the future were also completely unknown.

So dramatic were the results that doctors obtained with these various vitamins that it is only natural that clinical work should be conducted to determine the full extent of their value. Whenever a new drug produces dramatic results in some diseases, doctors immediately experiment with the drug in all manner of conditions to determine whether or not a new therapy for other diseases can be established. This was the case with viosterol when it was first introduced; it was the case with the sulfa drugs; it is the case with penicillin. Finally the extent to which any new drug is valuable is definitely established, and from then on it takes its rightful place in the doctor's arsenal of disease fighting weapons.

The vitamins that are now established are being used by doctors in their daily practice. More often than not, the many conditions which vitamin deficiency bring about are not acute. The doctor can recognize the symptoms of vitamin deficiency diseases when they are only in a mild state and for these conditions he will prescribe the vitamin or combination of vitamins that he believes will correct the condition. Because the various vitamins or combinations of vitamins have been found efficacious by physicians for so many conditions, a large number of people for whom vitamins have never been definitely prescribed, believe that they will feel better if they take vitamin products. Likewise, people for whom vitamin products have been prescribed continue to take them long after the need for them has passed. After all, it is not in human nature for a person to return to a doctor after he is feeling all right. And since the vitamins do not harm him he will continue to take them to insure himself against a recurrence of the condition which originally caused him to go to the doctor and for which the vitamins were prescribed.

And since vitamins were so efficacious and so widely used, it was only natural that attempts should be made to sell these products direct to the public through consumer advertising. Another reason why direct promotion to the public was undertaken is the fact that the proprietary medicine manufacturers were suffering serious inroads on the sales of many of their products due to the public preference for vitamins in place of proprietary medicines which they might take in the belief that they would feel better. Therefore, the public is having vitamin products and their virtues thrust at them in the newspapers and magazines, in the subways, buses, and street cars, and over the radio. And this promotion is helping to make the public vitamin conscious and increase the sale of the vitamin products of all manufacturers—both ethical and proprietary. Doubtless in many instances the strong claims of the advertised vitamins attract purchasers, but these strong claims in other cases drive the people away from the use of vitamins altogether or else cause them to buy a product which was recommended to them or their friends by doctors or pharmacists. And the products which the doctors recommend are always those of the ethical manufacturers.

As proof of this condition in the marketing of vitamins, surveys show that of all the vitamin products sold, approximately 67 per cent of the business is held by the ethical manufacturers. The remaining 33 per cent of vitamin sales is spread among all the manufacturers who advertise their products direct to the public. Vitamins account for the extremely large part of the market for drug products, totaling in 1943 approximately $140,000,000. This is considerably different from the figures of $220,000,000 or $250,000,000 that are glibly given, but it is a figure that very closely approximates the true conditions. This means that the ethical houses have a business in vitamin products of all types including cod liver oil and other vitamin oils,

(*Continued on page 238*)

YOUR LOVELY YOUTHFULNESS
I DON'T MEAN TO BE CROSS WITH MINE... BUT THIS HOT WEATHER...
NO "SUMMER NERVES" FOR US, WE FEEL GRAND... OUR SECRET HAS US ALL TAKING VIMMS
THIS SUMMER... Avoid the "Hot Weather Slump!"
VITAMINS Plus
Stan-B Gives You "Double Protection"
Stan B

THE INDUSTRY LOSES

SCARE copy is a two-edged sword. It not only can be turned successfully against the user but, unfortunately, it can often be used to indict an entire industry. For that reason the current Lady Esther campaign against cake make-up is especially ill-advised and the manufacturers of cake make-up are to be congratulated for having thus far refrained from a campaign of reprisal which might easily degenerate into a "so are you" affair.

Scare copy is also a confession of weakness. As students of advertising know it is only resorted to when what was formerly a successful merchandising formula no longer works, when a competitive product or program is moving ahead, and when it is felt that an attack on that product or program is the answer. In other words, it is a sure sign that someone is being badly hurt.

In the case of Lady Esther, this is an interesting revelation. There had been some speculation concerning the effect of cake make-up on powder sales but, in the rising market which has prevailed it was difficult to tell just what the effect was. However, the screaming which is now coming from Lady Esther makes it apparent that the effect was substantial. Lady Esther may, however, have been in a particularly exposed position due to the fact that the Lady Esther market is probably the same group which is said to be the best market for the cake make-up. It has been observed that by far the greatest proportion of sales of this make-up has been among girls and younger women and that is where Lady Esther's strength is also reputed to be. An additional irritating factor may well be the fact that Lady Esther, who once held an unchallenged first place in the 10-cent face powder market, has for the past few years been forced to yield that position to others.

In any case, the current advertising copy throws all discretion to the winds. "Don't Cork Pore-Mouths with Cake Make-Up Warns Science" is a typical headline and if the model with the magnifying lenses had a vandyke and a white coat he could easily represent Science with a capital S in the old patent medicine school of advertising. Then follows what purports to be a diagram of the skin surface showing a clean skin, a skin with cake make-up applied, and with cake make-up removed. A significant omission is a diagram of skin with Lady Esther's all purpose cream and face powder applied.

The copy goes on to say that "Skin specialists have told me their first warning to girls with skin troubles 'Stop using cake make-up.' " The skin specialists remain unnamed cloaked, in that beautiful obscurity which gives the foes of advertising their ready-make weapons while the quotes go 'round what Lady Esther says they said.

It is reported that this copy has been turned down by many newspapers and magazines who maintain their own censorship departments. But over the air, as this is written, continue to come the honeyed accents of "The Voice" tossing around words like Science and Pores and Danger with all the persuasiveness of a successful crooner.

This is bad business, for, if carried to a logical conclusion, it would only succeed in boomeranging not only on Lady Esther but on practically the entire industry. In its simplest terms, cake make-up merely furnishes a method by which face powder is fixed upon the skin for a longer period of time than is possible by ordinary application. The liquid face powders are other and earlier attempts to accomplish this same result as are certain of the cream base products. But the cake make-up has been the most successful of these make-up devices to date and the peak is not yet in sight. Face powder, itself, is pigmentation to cover facial shine or facial blemishes. All of these other devices are essentially the same thing with emphasis on getting it to stay on for longer periods. And it is a logical absurdity that this could end up as a fight over the effects of face powder on the skin, after which nothing or nobody would be safe.

Any conservative estimate of the number of units of cake make-up which have been used by women in this country alone would certainly agree upon a minimum of 25 million pieces. Manufacturers of this type of make-up agree that the number of complaints have been infinitesimal and the largest factor in the business is authority for the statement that, in terms of percentage, complaints received by his company would not amount to two complaints for each one hundred

thousand cakes of make-up that his company has sold. Compared to complaints received on any brand of face powder or any other cosmetic product it is obvious that this percentage (2/100,000 of one per cent) is truly negligible. He also points to the fact that in the past seven or eight years thousands of the most expensive and most closely safeguarded skins in the world (he refers of course to motion picture actors and actresses) have been using cake make-up under most trying conditions with complete success.

It is also a fact that the medical directors of British ordnance plants have standardized, after various experiments with other types of products, upon cake make-up as a safeguard against industrial dermatitis for women engaged in work in these plants. Many British plants, as a result, purchase large supplies of this make-up and furnish it to women workers without charge while in other cases it is simply recommended for use as a protective measure.

Which proves that what represents "Danger" to Lady Esther, represents a safety measure to British women war workers. Of course it is true that certain people cannot use cake make-up, just as it is true that some people with dry skins cannot use vanishing creams and some people with oily skins cannot use super-fatted creams. But to use scare copy emphasizing facts like that is purely destructive. Nobody can win in a fight of that kind and the whole industry loses.

COSMETIC STOCKINGS: You would oblige me very much if you could supply me with a formula for "liquid hosiery lotions." Thank you very much. White Plains.

In the preparation of a cosmetic stocking fluid I would suggest that you try the following preparation which has been worked out by Kalish:

Precipitated chalk	10.0
Talc	5.0
Titanium dioxide	3.0
Bentonite	2.0
Alcohol	8.0
Glycerine	3.0
Wetting agent	0.5
Methyl cellulose	0.5
Water	68.0
Dye and Pigment	Sufficient

Don't Cork Pore-Mouths With Cake Make-Up!

WARNS SCIENCE

WHICH IS YOUR SKIN?

BIG PORE OPENINGS: Hard little pellets of cake make-up clogging pore-openings may not merely help *stretch* and *enlarge* them . . . but even worse, interfere with normal functioning, gather dangerous germs, lead to ugly blemishes!

DRY SKIN: Watch out for dry skin. It looks years older, lacks the radiance of youth. If you have the slightest tendency to dryness or skin flakiness, be wary of cake make-ups.

Lady Esther baby-texture powder gives that young, smooth, "flawless look"...without danger!

Skin specialists have told me their first warning to girls with skin trouble is *"Stop using cake make-up"*. It exposes delicate skin to three serious risks . . . dryness, coarseness and blemishes. *Needless* risks, when you can achieve far more exciting loveliness . . . *without danger.*

Why Lady Esther "Glamorizes" your skin without danger

Made by the exclusive Twin Hurricane Process . . . of the finest and purest ingredients . . . Lady Esther Face Powder gives your skin an enchanting new radiance. Infinitely finer and softer than other powders . . . my powder spreads on your face not like powdery particles . . . but rather like a delicate flattering *film*, that hides little lines and blemishes, clings 4 long hours. Even in strong sunlight, your face never looks mask-like or chalky, but utterly natural . . . so fine, smooth and flawless as lovely baby skin.

These thrilling results I promise you are not just my *own* opinion. They are the actual words, the experiences of thousands of women . . . taken from actual letters! These women have *seen* the difference on their own skin. They know *from experience* that no other make-up is half so flattering . . . or stays on and stays fresh so long, as safe Lady Esther Powder!

What is your skin experience? Write me. My address is: 7171 W. 65th St., Chicago, Ill.

Lady Esther FACE POWDER

Gives skin a baby texture that clings for 4 long hours

Expanding Men's Lines

By H. HILFER*

Aside from the items that men normally use such as shaving creams and after shave preparations, and to a smaller extent hair grooming preparations, there has not been any concerted effort to produce toilet preparations made explicitly for men. There is a psychological barrier to overcome in any such sales effort consisting primarily of an association with effeminacy which the use of toilet goods entails. However, if the items could be presented in a form with which men are familiar much of this association may be removed, and if the product has a specific utilitarian purpose, I believe that men can be educated to its use.

The process of such education has already begun. There are better than ten million men in the armed services and serving in different parts of the world who have been subjected to the ravages of insects and sunburns, but who have also been given insect repellents and sunburn preventives to counteract the abnormal conditions to which they have been subjected. The administrative bodies of our armed forces are, therefore, responsible for the education of a large number of individuals to the use of toilet goods in a broad sense—a number which represents a good market in anybody's language and which need only be a small nucleus. The two materials mentioned in this connection, of course, represent definite assurance against physical discomfort. The fact that they are being used, however, will tend to break down the initial inertia to use other materials which, though they do not relieve the individual using them of any discomfort to himself, will help him in his associations with other people who may object to some of his normal physical defects, principally the odor of perspiration.

In elaborating on this theme it is well to remember that men and women have different habits and, therefore, it might be necessary to produce a product that will fit into the habits and customs of the individual, rather than to force the individual to change his habits. Though it is possible that a product would serve the same purpose in men and women, it may not possibly be formulated to serve both equally as well. A deodorant cream, for example, may contain the necessary ingredients to enable it to function on both men and women, but there would be a difference in application encountered by the fact that women shave under their arms, while men do not do so normally. Under the circumstances it would be easier for a woman to apply the cream since she does not have to force it through a hairy protective layer. If this same cream were made possibly of a softer consistency or perhaps "oilier" so that it could be spread over a larger surface, it would then become easier for a man to use. In addition, the odor incorporated in the cream, while it may be pleasing to a man when it is being worn by a woman, would not necessarily appeal to him if he him-

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self were bearing the scent. A different odor of the masculine type would probably be more apropos.

The choice of an odor for anything being sold to men is of primary importance and difficult to choose. Some men prefer just enough of an odor to cover the waxy or other distinguishing odor of the product itself, while others prefer a distinctive odor which will make itself evident. In any case any hint of effeminacy in the odor will cause the product to be thrown out.

I do not think that the presentation of a product such as a deodorant cream will appeal to men if it is presented in the same manner as it is to women. We are all agreed, I think, that women prefer their toilet goods in jars, but I do not think that men do. The reason may be that they are not accustomed to their use or to the feminine connotation. In any case they have a marked aversion towards jars. I believe it would be easier to sell it to him in a package with which he is more familiar, rather than to force the jar down his throat. Offhand, the collapsible tube seems to be a step in the proper direction, but with the modern trend towards plastics and the advance being made in packaging with plastic materials, a more novel approach may be made with their use.

Incidentally, the deodorant has become extremely popular with women and certainly there should be no reason why it should not be equally so with men. Certainly many men are habitual users of deodorants now but I feel that if it were presented directly to the man rather than treating him as an "also ran" there would be a marked increase in its popularity.

Hair groomings are in fairly common use among men and will probably continue to be. It occurs to me, however, that an improvement may be made along these lines which would probably increase their sales. Men who travel or go out on camping trips do not like to burden themselves with packages which may break with rough handling. If the product could be made so that it could be packaged in another medium than glass, I believe that the men using it would be more receptive. In a hair grooming of the mineral oil type, for example, it is possible to thicken the mineral oil to an ointment like consistency by the judicious addition of a metallic soap. The final product, though capable of being packaged in a collapsible tube, will also possess a thixotropic property which will cause it to liquefy if rubbed between the palms of the hands. From the standpoint of its use on the hair it will not necessarily differ from a similar product which is normally free flowing and therefore packaged in glass.

In speaking of the hair grooming I referred to camping trips. Kits put up for just such a purpose would undoubtedly attract a good market. I would include in such a kit an insect repellent in cream or ointment form, a sunburn preventive of the same consistency, a hair grooming, cream deodorant and the additional shaving preparations which are the backbone of a men's toilet goods line; all of these to be packaged in nonbreakable containers to render them capable of withstanding the roughest treatment.

As a result of the war there will be a considerable number of young men under thirty who will return home with greying hair. This does not appear to be an important factor to us who are beginning to turn grey now, nor are we inclined to attach too much importance to grey hair in younger men. However, it seems to me that when I was in that age group I did not want to appear too different from my contemporaries. A material, therefore, that could be easily used to hide greying hair might be attractive to some of these men if my assumption of being a normal individual is a correct one. There are now on the market hair crayons whose function is to do just that. These items with a few changes to make them more receptive to men may enjoy a good sale. There would be a tremendous barrier to overcome here. A hair crayon may be regarded as merely a beautifier, and the user may be afraid of the ridicule he may let himself in for if its use became known. However, the strong desire to appear the same as his contemporaries would have a tendency to overcome this barrier.

We all earnestly hope that plastic surgery has reached a point where it would be possible to hope that all the men would be able to return from combat without any visible scars. In other cases, I believe a preparation designed to cover the visible facial scars would be well received. These need not be much different than the facial make-ups now on the market except that they would have to be more highly pigmented. If put up in a package which would be attractive to men and sold as a defect hider rather than as a beauty enhancer, it may enjoy a good sale. Here again, the desire to appear as a normal individual would be reason enough for its use.

Many of the manufacturers who will have read the foregoing may find that they themselves have had ideas along the lines suggested. It is hoped that what has been said may form the nucleus for some worthwhile post-war planning.

SOLIDIFIED PERFUMES: I would like to obtain formulas and directions for compounding solidified perfumes, such as are sold for carrying in handbags. Also I would like a formula for making a solidified cube which may be used as a sachet to be placed in drawers or where clothing, etc., are stored. Lincoln.

There are many ways for making such preparations and some of the newer processes are protected by patents.

Essential oils may be solidified by mixing trihydroxyethylamine linoleate, the essential oil and water, all in equal proportions in the order given, and stirring well; or you might try the following British formula:

White beeswax	200 parts
Japan wax	200 parts
Ethyl phthalate	400 parts
Concentrated flower oil	200 parts

A solid cube used as a sachet is most simply prepared by adding the essential oils in any mixture desired to melted paraffin in the proportion of one-half to one dram of the perfume to one ounce of paraffin. Or you might try massing any standard sachet powder with tragacanth mucilage and drying it at a temperature not exceeding 80° F.

ECZEMA

By M. A. LESSER

THERE was a time when to say a person had eczema didn't mean much either to the physician or to the patient. This was because the category "eczema" used to be something of a catch-all for skin diseases of unknown cause. As knowledge of skin disorders became more precise, certain diseases which showed definite characteristics and causes were extracted from this dermatological scrap heap and treated as specific entities.[1, 2]

Undoubtedly because of its former all-inclusive meaning and also because of the changes that are constantly taking place, there is no clean-cut definition for eczema upon which all dermatologists agree. According to Sulzberger's[3] modern interpretation, the term eczema does not describe a disease entity, but rather a more or less characteristic form of cutaneous reaction. All eczemas, he noted, consist of inflammatory reactions in the uppermost portions of the skin. To Sutton and Sutton,[1] eczema implies chronicity, a tendency to recurrence, an element of idiosyncrasy, and the absence of complete etiologic analysis.

It is quite possible that some day, when the causes of all skin diseases are better understood, eczema will disappear as a dermatological classification. In the meantime, it serves a most important function. As Downing[4] once remarked, "There have been attempts to eliminate eczema from the medical vocabulary, but like rheumatism it seems entrenched as a household word. To the lay mind it is an awesome and treatment-resistant disease of the skin; to the practitioner it is a convenient label for an itching cutaneous eruption of doubtful origin, while to the dermatologist it is a symptom complex which at some time in its course is characterized by vesiculation and oozing." He feels that so-called eczema is an abnormal reaction to a normally innocuous exposure, generally external in origin, and that the person so afflicted has some predisposing change in his system that needs readjustment.

It is well recognized that eczema in its broader meaning, is the most common of all skin diseases[2, 5, 6] and that in time of war it becomes increasingly prevalent.[7] This is especially true if one includes the various forms of contact dermatitis, which some authorities[8, 9] feel belong in a separate category. Other dermatologists, like the authors[6] of the new military manual of dermatology, avoid issue by using the designation "eczema-dermatitis" in which they include eczematous dermatitis, eczema, plant dermatitis, contact dermatitis, atopic dermatitis, and nummular eczema. All of these conditions have certain characteristics in common. They are all superficial inflammations in response to chemical or physical irritants or sensitizers; or are superficial inflammations of unknown cause. In addition, their general treatment follows along parallel lines.

Of course, infantile eczema, which is often discussed in a class by itself, contributes materially to the prominent place of eczema in the listings of skin diseases.

Although the cause of an eczema often remains unknown, it is recognized that many factors enter into the etiology of this disease. Physical or mechanical factors, such as heat or cold, sun and other rays, irritation or interference with bodily functions, are often responsible elements. Chemical agents and other substances encountered in industry are also very important causal factors. Flowering plants and their products and other substances of botanical origin enter prominently into the picture in many cases of eczema.[4] Allergy to foodstuffs, inhalants, bacterial products, fungi, and sensitization to a variety of other substances account for a great number of cases of eczema.[10] While there is no hereditary transmission of a particular sensitivity, the predisposition to such affections is often a familial tendency.[11]

No age is exempt, but eczema appears to be somewhat more frequent during infancy and in old age. The skin disorder may occur on any part of the body or it may be generalized. However, it is found most commonly on exposed parts and in areas subjected to moisture and friction. Mild to severe itching, with or

without burning, is a characteristic, annoying symptom. Scratching to relieve this sensation often increases the severity of the inflammation and opens the way for secondary infection.

The skin lesions found in eczema vary somewhat with the particular substance responsible for the disease, but all have certain characteristics in common.[6 12] This is fortunate in that a general type of treatment can be undertaken even while the cause is under investigation. Then, too, one cannot forget that in very many cases the responsible factor cannot be determined and treatment must be entirely symptomatic and based upon the stage of the disease; whether acute, subacute or chronic.

Naturally, the logical procedure in any form of eczema is to ascertain and remove the cause. To this end the physician has at his disposal a variety of procedures worked out by both dermatologists and allergists. The localization of the eczema, a history of exposure and a knowledge of the family background, particularly as regards hereditary predisposition, often yield valuable clues. Skin tests are often useful and elimination diets may sometimes lead to the responsible foodstuffs. Sometime real detective work on the part of the physician is required to trace down the responsible agents. For example, recent studies have shown that human dander is an important cause of reaction in both infantile[13] and adult[14] eczema. Too often, however, even the most thorough and diligent search fails to disclose the causal agent.[15]

The general, local treatment of eczema varies with the type of skin condition found in the several stages of the disease. In the acute stage there is considerable swelling and redness, with blisters, denudation, oozing and crusting. In this vesicular, oozing phase mild treatment is the rule. In the presence of acute inflammation, soap and water must be avoided and cold cream or olive oil should be used to cleanse the affected areas. Cool, wet astringent dressings and lotions help to reduce the congestion and swelling.[10] Potassium permanganate, put up in 5 grain tablets, is recommended as a wet dressing and soak.[6] One tablet, added to three quarts of water (approximately 1:9,000 dilution) makes a soothing and moderately antiseptic wet dressing useful in the acute stage.

Boric acid solutions, preferably in 2 per cent concentration, are very helpful. Thiersch's solution, given below, is said[16] to be quite efficacious as an astringent compress when applied undiluted:

Boric acid	**12.0 Gm.**
Salicylic acid	**2.0 Gm.**
Distilled water	**1,000.0 Gm.**

Mild antipruritic lotions not only sooth the inflammed tissues but afford grateful relief of itching. A typical lotion of this sort which may be applied with an atomizer or used on a compress, consists of:

Boric acid	**8.0 Gm.**
Phenol	**2.0 cc.**
Glycerine	**0.6-2.0 cc.**
Water, to make	**250.0 cc.**

Soothing antipruritic lotions containing insoluble substances are best applied by gentle dabbing with cotton. Mixtures containing calamine and zinc oxide not only sooth but also form a protective coating over the serous lesions. Illustrative of the many such combinations suggested is the one given below:[16]

Calamine	**4.0 Gm.**
Zinc oxide	**8.0 Gm.**
Boric acid	**4.0 Gm.**
Glycerine	**8.0 Gm.**
Lime water, to make	**180.0 Gm.**

If desired, menthol (0.25 per cent) may be added to this lotion to heighten its cooling, antipruritic effect.

Powders are especially useful in the acute stages of eczema since they serve not only as absorbents but also as protectives against irritation. Finely powdered zinc stearate may be used on dry surfaces, but borated talcum is preferred when moisture is present. Borated talcum may readily be prepared by intimately mixing one part of finely powdered boric acid with two parts of fine talcum powder.

Ointments find but little use in the acute stage of eczema and greasy preparations are contraindicated as long as there is any serous exudation. Pastes, such as Unna's soft zinc paste, may prove useful to afford protection and hasten healing provided the surface is not moist.

As the subacute stage is reached the eczematous areas become dry, with the formation of scales and thin crusts. The skin may be slightly thickened and red or papular. In this phase of eczema, more stimulating preparations may be employed. According to Goodman[6] bathing is not contraindicated in the subsiding stages, but the water used must be soft. He feels that the bath may be made to serve other purposes than merely promoting cleanliness. It may be made alkaline by adding sodium bicarbonate or borax and it can be given soothing qualities by the addition of hydrolized starch.

Lotions and ointments containing crude coal tar are commonly used in the subacute stage. This may be applied as a 3 to 5 per cent ointment but in some cases the undiluted tar is painted thickly over the lesion and covered with purified talc. Olive oil or liquid petrolatum are needed to remove such ointments.[16]

Another type of preparation that is useful is one made with ichthyol as the active ingredient, as in the following example:[11]

Ichthyol	**8.0 Gm.**
Glycerine	**16.0 cc.**
Rose water	**16.0 cc.**

Another recently suggested[16] preparation for use during the subacute stages is made from:

Cade oil (Juniper tar)	**0.4 cc.**
Boric acid	**1.3 Gm.**
Starch	**16.0 Gm.**
Zinc oxide	**16.0 Gm.**
Petrolatum	**60.0 cc.**

(Continued on page 232)

Processing Face Powder

THERE is hardly a cosmetic line which does not feature face powder. The number of brands must run to several hundred at least and the better known and widely distributed ones are fairly uniform in quality. Here we have an item for which the market is pretty nearly saturated and for which no striking technical or chemical innovations appear to be in sight. Hence, packaging, merchandising skill and advertising effort are almost exclusively the factors which determine a brand's rise or fall.

Different skins require different kinds of face powder. It would be a logical thing for any manufacturer to produce his face powder in two or three different textures to meet the needs of various complexions. And this is being done. However, it makes production and maintenance of stock that much more complicated. With a range of shades—and sometimes a variety of odors—multiplied by different "weights" things get so involved for the retail store that only a few expensive treatment lines, who have their own representatives, can afford to feature such a choice and handle it successfully.

Other manufacturers have to be content to strike a happy medium in their formulation, to make one kind of base, use one odor and confine themselves to a reasonably small selection of shades—endeavoring to

suit the needs of the average Mrs. America on all scores.

This means to balance against each other in the formulation contradictory requirements, mainly slip against adherence and covering power. One raw material, starch, combines these characteristics nicely, but it is taboo for other reasons. Starch has been indicted for clogging and enlarging pores, because it absorbs moisture from the skin and swells in size, and for furnishing a breeding ground for bacteria. We feel with the vast majority of the cosmetic industry that starch and rice powder (the favorite a generation back) are guilty of these charges, and advise against their use in face powder.

This elimination of starch is probably the most significant single change in face powder formulation. Otherwise it has been and still is talc for slip, zinc oxide and titanium dioxide for covering power and zinc stearate for adherence. In addition to these calcium carbonate and/or magnesium carbonate for absorbency and often kaolin too. The approximate proportions in which these items are used are represented in the following formula for a face powder base.

Talc	670
Kaolin	120
Magnesium Carbonate	100
Titanium Dioxide	40
Zinc Oxide	50
Zinc Stearate	20
	1000

In order to increase the adherence some oil—mineral or vegetable—and also some lanolin may be added at a rate from ½ per cent to 1 per cent. To the base the colors are added, or rather the color blend, which has been formulated for each shade. Ever since the law requires that, excepting earth colors, certified colors only must be used in cosmetics the question of possible toxicity need not worry the face powder manufacturer any more. The problem has been boiled down to patient experimenting with the range of available colors until the desired shade is obtained.

While this is all that need be said about actual formulation some comments on the raw materials might be useful. Since you aspire to uniformity of your finished product you have to maintain uniformity of the ingredients as far as possible. Unfortunately for this desire all the products mentioned above come in many variations. Therefore it is recommended that you stick to the same source of supply, if it has proved satisfactory, and moreover buy large quantities at a time, to avoid differences between batches, even if purchased from the same source.

Then when the goods have arrived they should be checked. The important qualities of "slip" and "feel" as well as "adherence" and "covering power" so far have defied scientific testing approaches and must be judged empirically by an experienced individual.

(*Continued on page 236*)

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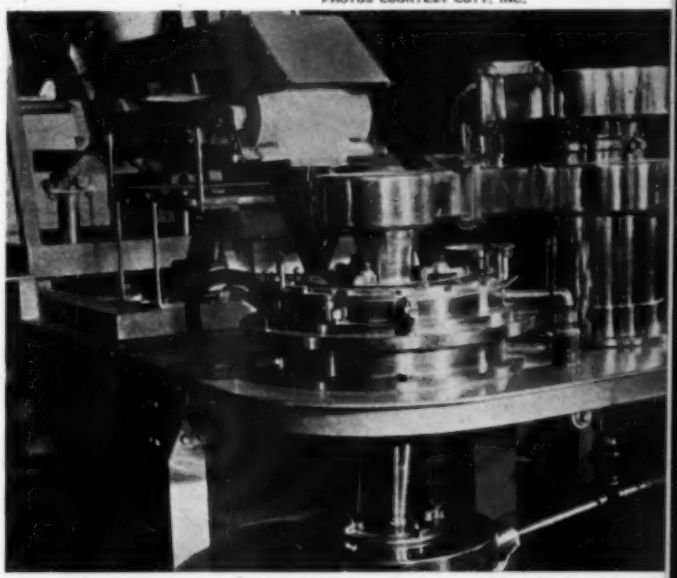


Pharmacological Fungicides

By ERWIN DI CYAN, Ph.D.*

In their pharmacological application certain substances are considered to be, and have been proven to be fungicidal. They are important in that connection, for the manifestations of fungicidal infection in human beings are comparatively common. Although the effects may be systemic, as in actinomycosis which may be fatal, the preponderant majority of these manifestations are local but exceedingly discomforting and unsightly. There is a possibility of a superimposed infection by a secondary invading organism, and in this possibility lies the real danger of fungous infection of the skin, which may occur anywhere on the body. The specific name of such a disease entity springs essentially from the place affected, rather than from the causative organism.

The following are the most common diseases caused by fungi in the human organism: Epidermophytosis (athlete's foot),—Trichophyton fungus; Tinnea Favosa (scalp ringworm),—Achorion schönleinii; Tinnea Sycosis (barber's itch),—Trichophyton ectothrix; Tinnea Tonsurans (scalp ringworm),—Trichophyton fungus or Microsporon audouini; Tinnea Trichophytina (circinata) (ringworm or trichophytosis),—Trichophyton fungus; Tinnea Trichophytina (cruris) (jockey itch), Trichophyton fungus; Tinnea Unguium (nail ringworm),—Trichophyton fungus or Achorion schönleinii; Tinnea Versicolor ("liver spots"), Microsporon furfur.

Mycoses in which systemic effects occur are: Actinomycosis, Gen: Actinomyces; Blastomycosis, Gen: Oidium; Sporomycosis, Gen: Sporotrichium.

It is evident, that there are relatively few fungi responsible for diseases in man. Rather unexpectedly, a host of substances are used to combat these mycoses. The reason for this apparent inconsistency lies in the existence of other factors, most of them physical rather than biological, which must necessarily bear consideration, before a fungous infection can give way to a fungicide. Among these are: (1) The form of therapy, such as the vehicle in which the fungicide is carried to the infected site; (2) state of subdivision of an insoluble fungicide; (3) state of skin; (4) site at which the mycosis appears; (5) length and manner of treatment; and (6) possible harm to the host. With relatively few exceptions, these fungicides are not specific for a given mycosis, but are influenced by one or more of these features. Except where definite mention is made in the individual entries of a therapeutic fungicide, no listing occurs as to the specific fungus against which it is active. The reason for this omission lies in the fact that a given therapeutic fungicide is used in more than one mycosis, and obviously more than one fungus is the causative factor.

1. *Form of therapy:* Inasmuch as the fungi rest below the epidermis, a fungicide must necessarily be more than a spray or surface application. Ointments do not afford the optimum contact between fungus and fungicide, for the contact is limited to the zone of proximity. Mobile liquids are more rational in that condition, for they enter the fissures, particularly if they are alcoholic, and of low surface tension.

2. *State of subdivision:* If the fungicide is used as a powder, the effect will be in proportion to particle size; the smaller the particle the more effective the fungicide. An example is afforded by sulfur, wherein sublimed sulfur is not as effective as precipitated sulfur, the latter being impalpable.

3. *State of skin:* A mycosis or its reinfection that has been present for a length of time, usually causes a cornification of the skin. In such an instance, it will be more difficult to bring the fungicide in contact with the seat of the fungi, for the hardened epidermis will be a bar to penetration.

4. *Site at which the mycosis appears:* It is manifestly simpler to deal with a mycosis on a part of the body which is not covered with clothing or in the vicinity of the hair. Thus trichophytosis (athlete's foot) appearing interdigitally offers the fungi a more favorable environment, than a lesion on the neck, which is exposed.

5. *Length and manner of treatment:* Due to the state of the skin or the infection, length of treatment must necessarily differ; if cautions against reinfections are observed, the treatment necessarily is shortened. A given mycosis may be in the process of healing and a reinfection recurring may be mistaken for an exacerbation.

6. *Possible harm to the host:* The use of certain fungicides (which may be more lethal than others) is precluded due to their toxicity to the host. Thus for instance, salicylic acid cannot be used in a 25% strength due to its keratolytic effect. Its action is however supplemented by benzoic acid, in combination with which it is commonly used.

This compilation of fungicides is not intended to serve as a list, from which items can be taken at random for inclusion into fungicidal preparations. The formulation of these preparations, requires pharmacological planning, and a consideration of the preparation in the light of the Federal Food, Drug and Cosmetic Act.

*Di Cyan & Brown, Consulting Chemists.

Fungicides in Therapeutic Use

Acid Acetic — CH_3COOH
5%-10%
As aqueous solution.
Use: In scalp or nail ringworm, the fungicidal effect of which is questionable.

Acid Benzoic (Benzenecarboxylic acid) — $C_6H_5.COOH$
3%-12%
Is the principal ingredient in Whitfield's Ointment which represents 12% benzoic acid with 6% salicylic acid (q.v.). Used in form of ointments, powders and solutions in alcohol and acetone.
Use: In nearly all mycoses, particularly against T. fungus.

Acid Salicylic (o-hydroxybenzoic acid) — $C_6H_4.OH.COOH$
3%-12%
Probably the fungicide most often used in fungous infection of the skin. Salicylic acid 6% and Benzoic acid 12% in petrolatum is the common Whitfield's Ointment. Used in the form of ointments, powders and solutions in alcohol and acetone.
Use: In nearly all mycoses, particularly against T. fungus.

Acid Sulfurous (Solution of Sulfur Dioxide) — H_2SO_3
10%-20%
Sulfurous Acid is a 6% solution of SO_2 in water. This solution is further diluted 5 or 10 fold (10% to 20%) for therapeutic use.
Use: In scalp or nail ringworm and barber's itch.

p-Chloro m-cresol (4 chloro 3 hydroxytolulene) — C_7H_7OCl
0.5%-1%
In alcoholic solution or as ingredient in powder, or ointment. Toxicity increased in alcoholic solution, due to greater solubility.
Use: Nail and scalp ringworm.

p-Chloro m-xylenol — C_8H_9OCl
0.5%-1%
In alcoholic solution or as an ingredient in powder.
Use: Nail and scalp ringworm.

Chlorothymol — 1:3:4:6 $C_6H_2.CH_3.OH.C_3H_7Cl$
0.5%-2%
In alcoholic solution, in ointments or as ingredient in powder.
Use: Athlete's foot.

Chrysarobin (Medicinal chrysophanic acid; purified Goa powder) — $C_{30}H_{26}O_7$(?)
5%-10%
In the form of ointments or in solution with volatile solvents. Exceedingly irritating and therefore must be used only on small area and never on or near mucous membrane.
Use: For its stimulating or irritating effect on the skin in eczemata, psoriasis, etc., rather than, although occasionally used as fungicide in scalp ringworm.

Cresol U.S.P. (Tricresol) — $C_6H_4.OH.CH_3$
0.2%-1%
A mixture of the 3 isomeric cresols; used in aqueous solution; toxicity lesser than phenol. Also used as a cresol and soap solution.

Cupric Sulfate (Bluestone) — $CuSO_4.5H_2O$
1%-5%
In aqueous solution, also by iontophoresis to deposit metallic Cu on lesion.
Use: Athlete's foot, nail ringworm, barber's itch; in actinomycosis it has been used internally in 50 mgm. doses per diem.

1:8 *Dihydroxyanthranol* (Cignolin, Anthralin) — $C_{14}H_{10}O_3$
0.1%-1%
Exceedingly irritating; not used with dyes due to danger of a permanent tattoo; too toxic to spread over large area of body.
Use: Scalp ringworm.

Ferric Chloride — $FeCl_3$
1%-15%
In alcoholic or aqueous solution as an application over small areas.
Use: In scalp ringworm and other mycoses for which use it has fallen into disfavor.

Formaldehyde 37% *Solution* (Formalin, Formol) — H.CHO
0.5%-2% solution
In the form of an aqueous solution; as an ingredient in powders, paraformaldehyde is employed. Must be used with caution, as formaldehyde hardens skin and the horny layer formed precludes further intimate contact between fungicide and fungus.

Halenol (2,2-Dihydroxy 5,5-dichloro diphenyl methane, Compound G-4) — $(C_6H_3)_2CH_2Cl_2(OH)_2$
1%-4%
In form of ointment, powder or hydro-alcoholic solution.
Use: In athlete's foot.

Hydrogen Peroxide — H_2O_2
3%
In full strength.
Use: In nail ringworm but otherwise rarely as a fungicide.

Hydroquinone (1,4-dihydroxybenzene, Quinol) — $C_6H_4(OH)_2$
1%-3%
In alcoholic solution.
Use: In some mycoses for which use it has fallen into disfavor.

8-Hydroxyquinoline Sulfate (Chinosol, Oxyquinoline Sulfate) — $(C_9H_6N.OH)_2.H_2SO_4$
0.1%-2%
In aqueous solution; as a powder containing 1% with boric acid and talcum.
Use: Athelete's foot, scalp ringworm, Jockey itch.

Magnesium Borate (Antifungin) — $Mg(BO_2)_2.8H_2O$
5%-25%
Used only as a powder, usually in combination with boric acid, talcum and salicylic acid.
Use: Athlete's foot.

Mercuric Chloride (Bichloride of Mercury) — $HgCl_2$
0.1%-0.2%
In aqueous solution.
Use: Ringworm of scalp or body.

Mercuric Iodide, red (Mercury Biniodide) — HgI_2
0.2%-0.5%
In form of ointment.
Use: In some mycoses.

Mercurous Chloride (Calomel) — $HgCl$
As a dusting powder.
Use: In various mycoses, the fungicidal effect of which is questionable.

Mercury, Ammoniated (Mercury Chloride Ammoniated, White Precipitate) — $HgNH_2Cl$
2%-10%
In form of ointment usually containing a hydrophyllic base.
Use: In nearly all mycoses.

Methylrosaniline (Gentian Violet, Methyl Violet, Crystal Violet, Aniline Violet)
0.5%-2%
The principle involved in the use of dyes for fungicidal purposes, depends upon their quality of entering into the fungus cell, creating a cytological crisis.
Use: Athlete's foot, and other mycoses.

b-Naphthol (2-hydroxynaphthalene, Betanaphthol) — $C_{10}H_7.OH$
2%-10%
Employed in oil solution or ointment, more rarely as ingredient in powders. Too toxic for general use.
Use: In some mycoses.

Phenol (Hydroxybenzene, Carbolic Acid) — $C_6H_5.OH$
1%-5%
In the form of ointments or water-glycerin solutions.
Use: In nearly all mycoses.

Phenylmercuric Borate — $C_6H_5HgBO_2.H_2O$ (?)
0.02%-0.2%
In aqueous solutions or as constituent in ointments. Stronger concentrations for single use (as preoperatively) and progressively weaker solutions for methods of use in which contact with body is prolonged.
Use: In various mycoses.

Phenylmercuric Nitrate — $C_6H_5Hg.NO_3.C_6H_5Hg.OH$
0.01%-0.08%
In aqueous solution or as constituent in ointments. Stronger concentrations for single use(as preoperatively) and progressively weaker solutions for methods of use in which contact with body is prolonged.
Use: In various mycoses.

o-Phenylphenol, Sodium (Dowicide A) — $C_6H_4.C_6H_4O.Na$
1:5,000
In aqueous solution; as a constituent in liquids or powder.
Use: In various mycoses.

Potassium Permanganate — $KMnO_4$
1%-10%
As an aqueous solution in low dilutions as foot bath and in higher strengths as an application.
Use: In nearly all mycoses, but particularly in athlete's foot as foot bath.

Pyrogallol (1,2,3Trihydroxybenzene, Pyrogallic Acid) — $C_6H_3(OH)_3$
1%-5%
Employed in the form of solution or ointment; its use attended with danger as hemolytic or renal crises may appear due to absorption from skin.
Use: In some mycoses.

Resorcinol (1,3 dihydroxybenzene) — $C_6H_4(OH)_2$
5%-10%
In the form of ointments or alcoholic solutions. Its use in scalp ringworm tends to darken the hair.
Use: In scalp and nail ringworm.

Silver Picrate (Picratol, Silver trinitrophenoxide, Silver trinitrophenolate) — $C_6H_2(NO_2)_3O.Ag.H_2O$
0.5%-1%
In the form of a trituration with kaolin or boric acid as a vaginal insufflation, or as an aqueous solution, jelly or vaginal suppository.
Use: For its fungicidal and antiseptic effect against vaginitis and urethritis caused by Trichomonas vaginalis or Monilia albicans.

Sodium Bisulfite — $NaHSO_3$
2%-10%
In aqueous solution.
Use: Against nail ringworm, barber's itch and dermatomycosis.

Sodium Hypochlorite Solution — $NaOCl$
0.45% U.S.P. strength (Dakin's Solution modified)
By irrigation as a solvent for necrotic tissue or as wet dressing.
Use: In athlete's foot.

Sodium Sulfite — Na_2SO_3
2%-10%
In aqueous solution.
Use: Against nail ringworm, barber's itch, dermatomycosis.

Sodium Thiosulfate (Sodium Hyposulfite, Hypo) — $Na_2S_2O_3.5H_2O$
10%-25%
In the form of aqueous solution, more rarely as an ingredient in powder.
Use: In scalp or nail ringworm and in barber's itch

Sulfathiazole — $C_9H_9N_3O_2S_2$
3%-10%
The sulfonamides are only fungistatic and even this quality is inhibited by o- and p- aminobenzoic acids; as dusting powder or ointment.
Use: In athlete's foot.

Thymol (5-methyl, 2-isopropylphenol) — $(CH_3)_2CHC_6H_3.CH_3.OH$
0.5%-10%
In oily solutions 10%; in alcoholic solution 1 to 5% strengths as absorption which is favored by alcohol, may give rise to toxic symptoms.
Use: Internally in actinomycosis; externally in various mycoses for which use more effective fungicides exist.

Trinitrophenol (Picric Acid, Picronitric acid, Nitroxanthic acid, Carbazotic acid, 2,4,6-trinitrophenol) — $C_6H_2(NO_2)_3OH$
1%-5%
As a saturated aqueous solution in water (1.2%) or as an alcoholic solution; never employed dry as an ingredient in powders nor in ointments. In the latter form, butesin picrate is much used in burns.
Use: For its general antiseptic effect, and occasionally as a fungicide in dermatomycosis.

Vioform (5-chloro-7-iodo-8-hydroxyquinoline) — $C_9H_4N.OH.ICl$
In the form of powder as vaginal insufflation; with caution in liver disease.
Use: For its fungicidal effect against vaginitis caused by Trichomonas vaginalis.

The following are therapeutic fungicides but litt'e experimental evidence is presently on hand.

Bis (2-hydroxy-5-iodophenyl) oxide
Useful in seed treatment according to patent (U.S.) No. 1,932,595.

4,4-*Diiodo morpholine* (Morpholine periodide)
A fungicidal agent in skin infections.
U. S. Patent No. 2,290,710

b-Iodo Propionic Acid
Hofman, Schweitser & Dalby—Food Research 4;536;1939

Sodium Iodocholate
Described as greater and more prolonged fungicidal effect than iodine. Scherzer & Goedrich—J. Am. Pharm. Ass'n.. 29;255;1940

Sodium Propionate
0.75%-1.25%; 5%-20%
Aqueous solution; pH should be maintained at 5.5

Tetraiodomethenamine (Hexamethylenetetraminetetraiodo)
1:5,000
Against microsporon lanosum.
Sharfit & Highman—Arch. Derm. & Syph. 16;697;1927

LOOKING INTO THE FUTURE

When you think of bottles think of

Swindell

Machine made and hand made glass containers for cosmetics, drugs and beverages.

SWINDELL BROTHERS, Inc. BALTIMORE, MARYLAND

200 FIFTH AVENUE, NEW YORK ROBERTO ORTIZ—HAVANA, CUBA

Packaging and Selling

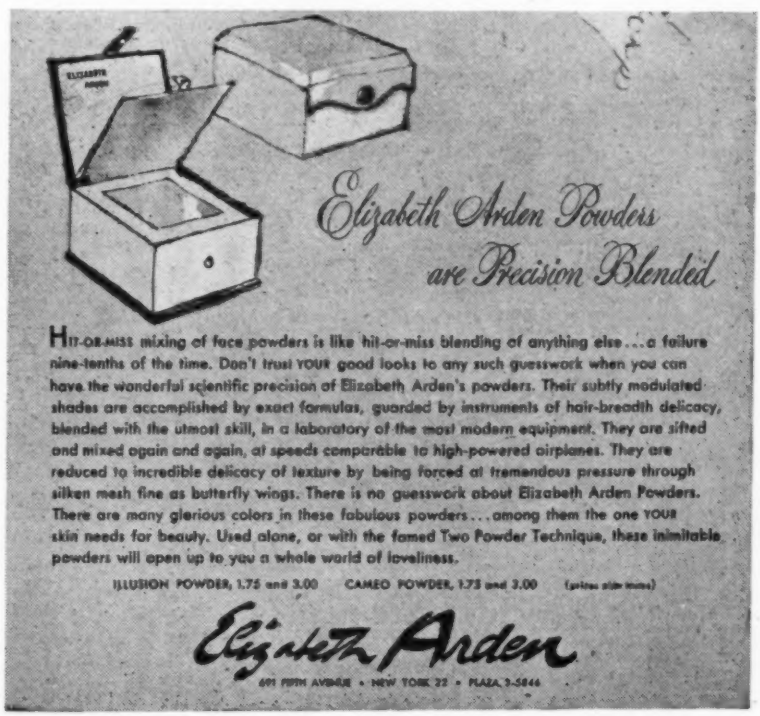
Powder Explosion

Students of advertising were greatly interested by the Arden ad which is headlined "Elizabeth Arden Powders are Precision Blended." It went on to say that "Hit-or-miss mixing of face powders is like hit-or-miss blending of anything else . . . a failure nine-tenths of the time. Don't trust your good looks to any such guesswork when you can have the wonderful scientific precision of Elizabeth Arden's powders. Their subtly modulated shades are accomplished by exact formulas, guarded by instruments of hair-breadth delicacy. blended with the utmost skill, in a laboratory of the most modern equipment. They are sifted and mixed again and again, at speeds comparable to high-powered airplanes. They are reduced to incredible delicacy of texture by being forced at tremendous pressure through silken mesh fine as butterfly wings. There is no guesswork about Elizabeth Arden Powders. There are many glorious colors in these fabulous powders . . . among them the one your skin needs for beauty. Used alone, or with the famed Two Powder Technique, these inimitable powders will open up to you a whole world of loveliness."

Although the sceptics hooted at the reference to the butterfly wings there were others who staunchly maintained that after all, there was no reference to the ingredients coming from "far distant places."

But between the lines the barely stifled screaming indicated to those who appreciate the nuances, that someone was being badly hurt. They pointed out that copy of this type is usually forthcoming when competitive blows are landing with regularity in vital spots. Arden has pretty much taken her leadership for granted in many leading fashion stores throughout the country but it is currently reported that her figures are being pressed and even surpassed in several of what she likes to think are her key accounts.

It's no secret of course that the leading exponent of hand-blended-to-order face powder is Charles of the Ritz who with that idea spearheading its merchandising drive, has made what is generally considered to be the outstanding treatment line success of the past ten years.


Elizabeth Arden Powders
are Precision Blended
HIT-OR-MISS mixing of face powders is like hit-or-miss blending of anything else . . . a failure nine-tenths of the time. Don't trust YOUR good looks to any such guesswork when you can have the wonderful scientific precision of Elizabeth Arden's powders. Their subtly modulated shades are accomplished by exact formulas, guarded by instruments of hair-breadth delicacy, blended with the utmost skill, in a laboratory of the most modern equipment. They are sifted and mixed again and again, at speeds comparable to high-powered airplanes. They are reduced to incredible delicacy of texture by being forced at tremendous pressure through silken mesh fine as butterfly wings. There is no guesswork about Elizabeth Arden Powders. There are many glorious colors in these fabulous powders . . . among them the one YOUR skin needs for beauty. Used alone, or with the famed Two Powder Technique, these inimitable powders will open up to you a whole world of loveliness.
ILLUSION POWDER, 1.75 and 3.00 CAMEO POWDER, 1.75 and 3.00
Elizabeth Arden
691 FIFTH AVENUE • NEW YORK 22 • PLAZA 3-5844

Travel Talk

The sales manager of one of the prominent cosmetic companies was good enough to send us this interesting description of the joys of selling cosmetics in this year of war, 1944. The salesman whose report this is, is in fact a woman and her reactions furnish an interesting commentary upon the times.

"This isn't a 'beef'—it's an explanation as to why you aren't getting a report on Wilmington for today!

"After getting up at 4.00 A.M. yesterday at Raleigh to catch a 6.00 A.M. train that didn't leave until 9.30 (connecting busses late, due no doubt to holiday traffic) and having to stand for the entire 3½ hour ride that was supposed to be a mere two-hour trip. Anyway, I arrived in Fayetteville at 1.00 P.M. instead of 8.00 A.M. Tried to get a day rate on a room so I could wash the Carolina dirt off me before I called on anyone. Got the room for $1.25, only no towels nor soap! And there wouldn't be any towels until 3.00 P.M., or later! So the room wasn't of much use to me—did try to do the best I could and used their mirrors anyway and went down and asked for my money back (got 75 cents of it anyway!)

"Made my calls and had a 6.30 P.M. bus to get to Wilmington, but it was late one-half hour, then one hour, then two hours. It got in finally at 10.15 P.M. —or the substitute bus did—the other had caught fire and burned enroute! The trip from Fayetteville to Wilmington was 100 miles, usually a three or three-and-one-half-hour trip. Wired the hotel to please hold my room—I'd get there eventually. The bus that sub-

stituted was one of those old huge jointed truck-like things that formerly hauled new cars overland—on top and inside. So it had something that they called 'seats' running on each side like an old fashioned street car where you face people on the opposite side. Try riding a hundred miles and not have anything to brace yourself against the bumps (except a truck tire in the middle of the floor for your feet—at least I was lucky, I got a seat in front of this tire purposely as I knew it would help some!) What a trip!

"I arrived at 1.30 A.M., practically dinnerless as I had just grabbed a sandwich at 6.00 P.M. and then when the bus was reported late, but 'due any minute' I didn't dare leave the bus station to forage for food for fear I'd miss it. The bell boy went out and got a sandwich for me and brought a quart of milk! I drank it all, too! I unpacked so the wrinkles could hang out of my clothes for tomorrow, washed hose, etc., and took a hot bath, got to bed about 3.15 A.M. Woke up at 4.30 with livestock sharing my bed with me! Called the desk (the place was alive and I am allergic, physically and mentally to them—they poison me! They sent a bell boy up to move me, washing and all); had to partially pack and dig out a robe, etc. All in all, I got to bed the second time at 5.00 A.M., and then I was in no condition to go to sleep—every wrinkle of the bed clothes and every hair that touched my neck or face seemed that it was crawling—but that room was free from them anyway, and it had two beds! Well, when I looked at myself at 9.00 A.M., I went right back to bed again—one eye was still swollen. I had a two-inch round welt on my forehead (both are still evident tonight, but not bad. I told you they poison me like that—I swell and stay swelled—had a North Woods hunting lodge experience once, and once is enough. And incidentally, they don't look like wood ticks very much. It isn't a pretty subjust to talk about, but darn it, I want you to know what conditions I'm trying to work under.

"Anyway, between the exhaustion (busitis') circles under my eyes and the one partially shut, I stayed in my room all day as I sure would have been a swell ad for our product if I had tried to make any calls! (You men don't have to look as if you used it yourself and it performs miracles.)

"And if you think this is great life, you're wrong. But as I said, this isn't a 'beef' as it is nothing you're responsible for and if I thought for one minute this is going to be my usual existence for the next year or so, with travel conditions so terrible everywhere as around here, I'd join the Waves tomorrow, or get a job as a waitress and retire on my tips! But as I said, this is a detailed report of life on the road in 1944 and an explanation why I accomplished nothing today. Oh, yes, forgot to say I was moved again tonight—the other room was a double one and the house is filled tonight. I'm philosophical, but disgusted, and hope I get an account sold tomorrow."

Spraying Cosmetics

Egmont Arens believes that in the future women will not be bothered removing the caps from bottles or jars and pouring or scooping out their cosmetics and then replacing the cap. He has designed some plastic containers which make it possible to spray cosmetics on the skin. He thinks this type of container will be practical for deodorants, suntan lotions, skin fresheners, leg make-up, rouge, powder bases, perfume, hand lotions and hair lotion.

Within a plastic bottle there would be a steel shell containing a gas that would create the pressure necessary to spray the liquid. Soda water, in a siphon bottle, works on the same principle. Aviators' life rafts and life preservers are inflated by the same process. Proposed cosmetic containers would have a button on top which when pressed, would release a spray of the liquid cosmetic.

Drug Container Study

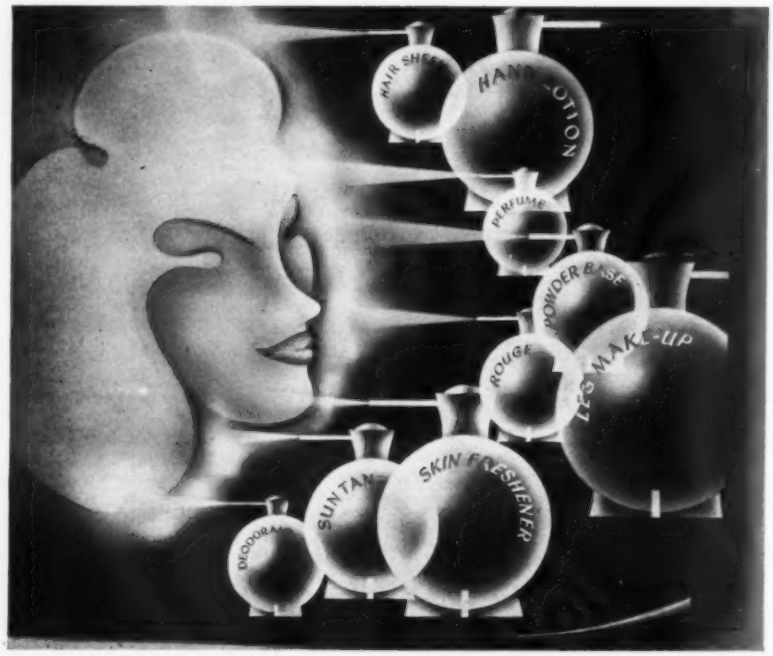
The following figures and conclusions on the drug industry with particular reference to its packaging future have been arrived at by Moore & Co., Philadelphia, industrial analysts for the National Paper Box Manufacturers' Association. It says that "Drug and chemical manufacturing lines, with an estimated retail turnover of $1,325,000,000 and a manufacturers' production of some $875,000,000, offer a tremendous market for containers of various sorts in the post-war period. Even in the war year of 1944, the drug and chemical lines will use about 975,000,000 containers of all kinds.

"Replies also show that about 38 per cent of all packages used for drugs and chemicals are of the setup variety, the balance being folding, metal, corrugated and glass. Considerable duplication is noted as bottles are further packaged in folding or set-up boxes.

"New products in the drug industry are listed in the survey as: (a) safe, harmless germicides for internal-external use; (b) penicillin and other new drugs; (c) amino acid products; (d) sulfa drugs; (e) synthetic quinine; (f) gelatin as a substitute for blood plasma.

"Drastic changes expected to take place in the drug industry were listed as (a) startling new methods of treating cancer: (b) machines and methods adapted to new drugs and discoveries; (c) easing of labor restrictions. About 10 per cent looked for no drastic changes.

"Drugs and chemicals offer a great



THE *Beauty* OF A PACKAGE THAT SELLS

PACKAGES BY RITCHIE
PROVE THAT BEAUTY SELLS

Few products may be more *unlike* than the two shown above. But *buyers of both* listen to radios, attend movies, keep up with the Joneses, and choose nothing—not a necktie, a hat, a home to live in, nor a desk to work at—without regard to *how it looks!*

Whether buying a new car, a packaged product or an apple—people feel that *outward* good appearance is a sign of *inward* goodness—a mark of quality.

That's why leading merchandisers come to Ritchie for *eye-appealing* packages.

Call it "good design," "attractive appearance," or what you will—*beauty* SELLS! A hydraulic jack—sold to garagemen, presumably interested in function only—is given more interesting shape, more attractive color—and sales increase 75%. The *jacket* only of a hot blast stove is redesigned *for better appearance.* Its sales double. One Ohio manufacturer's health scale, when redesigned, matched *ten* former years' sales in *one!*

In a product or its package—whichever meets the eye—beauty is a force that moves people to favor that product over others of its class!

That is why, in *every* package by Ritchie, whether it contains industrial tools or imported perfume—you will always find, in its lines, in its proportions, color or general design, a strong eye-pleasing quality—elements of beauty.

HOW TO GET A BETTER PACKAGE AT LESS COST

Let Ritchie design a package for you and it will have beauty *more than skin deep.* It will have the right material and structure for its job. It will be practical, convenient to use, easy to handle, to stack and display. It will proclaim your product-identity. It will be memorable and attractive. And Ritchie's expanded, war-developed facilities for volume postwar production assure its low cost. Let Ritchie demonstrate how *you* can get a better selling package. *Write us today.*

W. C. *Ritchie* AND COMPANY

8827 BALTIMORE AVENUE • CHICAGO 17

Set-Up Paper Boxes • Fibre Cans • Transparent Packages

NEW YORK • DETROIT • LOS ANGELES • ST. LOUIS • MINNEAPOLIS

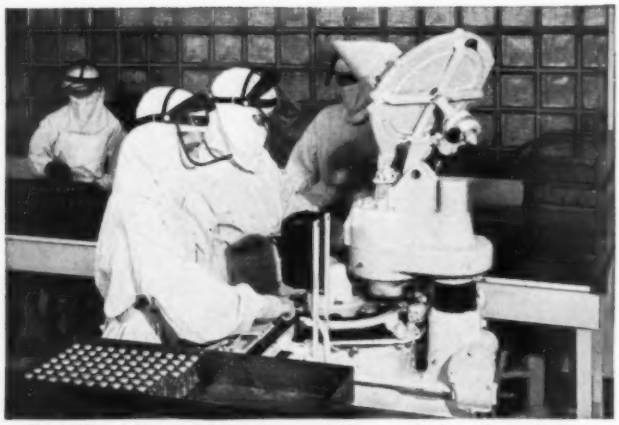
Precious Penicillin is *Alseco Sealed*

Developed before the war. Carried forward by the war. Destined for great things after the war. That's the story of penicillin.

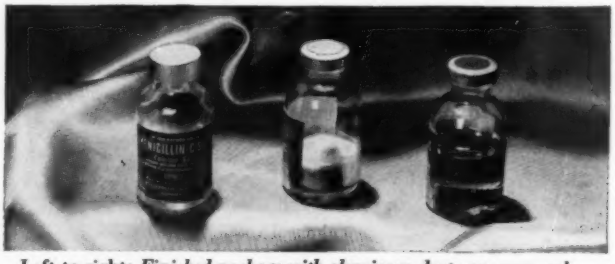
In a modest way, the story of the seals that seal penicillin is directly parallel. This type of Alseco Seal was developed for intravenous solutions before the war. Next it was adapted for serums. Then came blood plasma. And now millions are being made for sealing penicillin.

It is a versatile seal, one that will find many uses when it can be offered freely to glass container users. It is tamperproof, completely eliminates leaking and breathing and will withstand autoclaving.

Perhaps you would like samples to study its possibilities. Write us if you would.



Penicillin vials are sealed under carefully controlled sterile conditions by masked, gowned, gloved operators. Alseco Machine that applies the caps under top pressure and locks them to the vials is at the right.



Left to right: *Finished package with aluminum dust cap over seal. Aluminum seal which is locked in place by being rolled under flange on vial. Tear-off tab removed to permit inserting hypodermic needle through rubber stopper.*

ALSECO

TAILOR MADE

SEALS AND SEALING MACHINES

ALUMINUM SEAL COMPANY · 1323 THIRD AVENUE · NEW KENSINGTON · PENNSYLVANIA

At your service: 30 years of experience building quality seals and sealing machines

future for the set-up, folding and corrugated box industry, it is shown, to meet the needs of manufacturers and wholesalers for new type containers. The latter will be required for new chemicals, pharmaceuticals, drugs, health appliances, plastics, germicides and insecticides.

"All of these and hundreds of others will create new and different container demands from any previously used, and they will be placed on the market either during the war or immediately after its close. Many of these are now shrouded in secrecy or being produced exclusively for war purposes.

"In proprietary medicines, one manufacturer is quoted to the effect that there would be fewer drug stores but insisting at the same time that there will be an increased demand for proprietary products when business returns to normal. A heavy demand is expected from the European and Asiatic markets post-war.

"A large New York concern predicted that at least 10 per cent of all pharmaceutical trade after the war will be entirely new products now made for war use only. The labor situation will be easier in this field which will be able to re-employ slightly wounded or handicapped service men. Waterproof paperboard substitutes will continue to be used because of their lighter weight than metal or glass.

"Aluminum and black plate containers are also favored by some in preference to paper boxes. However, the paper box will also take the place of some heavier containers."

Ceramics

Since we always have one weather eye out for new uses for ceramic containers, we note with interest two additions to the collection. Jean Nate is introducing a new bubbling bath in an old-fashioned little jug in an off white ceramic. The closure is a cork in a wooden cap. The jug holds enough liquid for about thirty baths—15 ounces to retail for $3.50. John Hudson Moore, Inc., utilizes sea-green ceramic for its new Sportsman fish shaving bowl. This handsome bowl has a big-mouth base on the lid which serves conveniently for a handle and at the same time carries out the sports theme characteristic of all the containers in this fine line of toiletries for men.

In an Eggshell

M. Louis, New York hair stylist, breaks into the national market with an Eggnog Shampoo, a concentrated liquid containing (so they say), real egg—dehydrated—to retail at $1.00. The shampoo comes in a novelty eggshell container which holds enough of the liquid for five or more complete shampoos. It is made of plastic and attached to a removable base which unscrews and the eggshell can be inverted and placed in the base while in use. When the container is empty, it is suggested that it can be decorately used as a bud vase, darning egg, or ornament for bathroom or dressing room shelf. As a matter of fact, it can even be coated with nail polish for color effects! With the maid problem such as it is, we'd much rather not have any more bathroom shelf ornaments, but it's probably a swell idea and the re-use value of the container will undoubtedly help sell the shampoo.

Overseas Suggestions

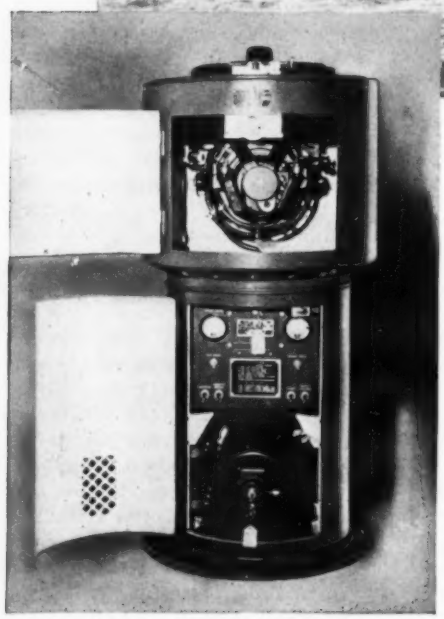
Yardley has gone through its line carefully and selected a group of products which make interesting gifts for the man or woman in uniform overseas

—convenient to handle and easy to send. For instance, the Yardley powdered shampoo is suggested—for him in natural; for her, the henna, camomile or natural. It's easy to ship, can be slipped in an envelope, and takes up little space in a suitcase, and most important of all, a little goes a long way. Then there is the Yardley Powdered Sachet, a "dry" perfume. This is a highly concentrated powdered sachet in delightful floral scents. Applied behind the ears, on the wrists, and at the base of the throat, it is a satisfactory substitute for the liquid type of perfume. Aside from its use as a perfume, it's just as nice to sprinkle on lingerie and handkerchiefs in dresser drawers. The Yardley shaving bowl, shaving cream, talcum, invisible talcum and after-shower powder, all make desirable gifts for the G.I.'s. Yardley Lavender soap would be treasured in foreign outposts where any soap is at a premium. The amount of gift merchandise purchased for overseas all year round and particularly for Christmas is so large that these Yardley "suggestions" sound like good merchandising.

A SECRET WEAPON

that plays a vital role in

INVASION LANDINGS



Many of the landing craft in the Normandy invasion were equipped with the new lightweight Gyrocompass made by Package Machinery Co.

SPLIT-SECOND invasion time-tables call for unfailing accuracy in beachhead landings by our invasion craft . . . The secret weapon that makes this possible has recently been revealed by the U. S. Navy . . . It's a new lightweight gyrocompass only 19 inches in diameter, made by the Sperry Gyroscope Company and the Package Machinery Company.

Foreseeing the need for such an instrument, Naval authorities drew up specifications for it back in 1940. In record time, Sperry engineers produced a successful model – the Mark XVIII.

Non-magnetic and unaffected by electrical machinery, this compass *points true north.* It is a marvel of compactness, everything being contained in the binnacle except the voltage regulator and repeaters. And it has the traditional sturdiness of everything pertaining to the Navy.

Today hundreds of Mark XVIII compasses built by us are in service, and we have many more in production. We of the Package Machinery Company take deep satisfaction in being able to carry on this important work, as well as the building of various types of armament machinery and packaging machinery now serving many branches of our combat forces.

PACKAGE MACHINERY COMPANY
Springfield 7, Massachusetts
NEW YORK CHICAGO CLEVELAND LOS ANGELES TORONTO

PACKAGE MACHINERY COMPANY

Over a Quarter Billion Packages per day are wrapped on our Machines

Yanky Clover Redesigned

With the American countryside as its theme, Richard Hudnut has redesigned the Yanky Clover fragrance line. Delicately and femininely executed, actual country scenes have been portrayed on the packages in the familiar Yanky Clover color combination of fuchsia and yellow. From the dainty individual cake sachets to the large gift boxes, there is a distinctive and charming pattern throughout of good old American farm life, with that "Oklahoma" feeling. Enid Edson designed them.

Army Cosmetics

A substantial part of the $400,000,000 to be spent for "comfort goods" by the Army this year will go for cosmetic items for both men and women in the service, according to a statement from the War Department. Articles used by both include astringents, lip pomade, deodorants, hand lotions, sunburn lotions and sunburn preventives, shampoos and talcum powder. Strictly feminine items are: powder compacts, cleansing cream, lipsticks, hair nets, bobby pins, nail polish, rouge, tweezers, powder and powder puffs.

New Perfumes

Fabulous is the name given to Parfums Charbert's newest perfume presentation. The fragrance, like its name, has a certain splendor. It is packaged in the same jewel-cut flacon as Breathless, in a green and gold box. It retails from $3.50 to $45.00.

Hattie Carnegie presents for the first time Perfume 49, described as a golden essence to put a woman in her most fascinating mood. Hattie Carnegie had her unique feminine head bottle washed in twenty-two karat gold to hold Perfume 49—"a matchless setting for a matchless fragrance!"—according to the copy. The bottle is wrapped in natural Madagascar straw, tied with a name tape and sealed with a blue wax replica of the Carnegie crest. One and one-half ounce size sells for $35. This is the fifth addition to the series of Hattie Carnegie perfumes, the others being, Carnegie Blue, a spicy fragrance; Carnegie Number 11, a floral scent; Carnegie Number 7, with an amber undertone, and Carnegie Hypnotic, a heady fragrance. All of these are similarly packaged in the graceful figure of a feminine head and shoulders—but no twenty-two karat gold!

For Men Only

John Frederics, who about ten years ago first launched its Golden Arrow line of perfumes, is now introducing Golden Arrow cosmetics featuring face powder in five shades; foundation cream in three shades; night cream; cleansing cream, and lipsticks in five shades. Soft grey and gold serve a complimentary purpose in the decoration of the jars and powder box. The lipstick cases are of ivory colored plastic with gold lettering.

Something new and exciting has been added to the men's line too! The line which consists of soap, cologne, after shave lotion, and talc, is now augmented with a "For Men Only" cream. Packaged in a grey jar with red and white design, this appears to be an "all purpose" cream for men. How about leaving it on all night? John Frederics apparently seems to have had the idea that men go borrowing friend wife's creams (can't prove it by us—he is in the Army!), and so it was decided to bring out a cream "For Men Only." It sells for $2.50 for four ounces—pretty expensive stuff to be used on a mere male—for rather an indefinite purpose!

These boys, as you know, are famous milliners and hence the lack of inhibitions and the first, so far as we know, cosmetic cream for men.

Bree Cosmetics Companion Piece

Bree Cosmetics, which up to this time has been concentrating its advertising and promotion on its Models' Special cake make-up, has announced a new product—Models' Special lipstick. "Created for clothes-conscious fashion models and deliberately color-styled by them. Now, for the first time available to the public," the copy reads. There are six "professional" shades: No. 11—with orange; No. 12—definitely red; No. 13—deep rose; No. 14—ripe red; No. 15—midnight blue; No. 16—Sable Dark. Models' Special lipstick comes in a case jumbo in size, of pastel colored plastic with smart dubonnet lettering—a nice companion piece to the new, attractive plastic case which is now being used for Models' Special make-up. The product will be promoted much the same as the make-up, with cooperative newspaper advertising and display material available; full color magazine advertisements glamorizing both products in the leading class publications.

Beautify and IDENTIFY

YOUR PRODUCT IN ONE FAST, LOW-COST OPERATION

and keep them beautiful and smartly identified right up to the point of re-purchase . . . with Meyercord Decals. Available in any design, size or colors, Meyercord Decals offer hand-painted effects at a fraction of the cost. And because they're washable, durable and alcohol-proof, they *keep* your product name permanently fresh and bright. Easily applied at production line speed to glass, wood, pottery or metal, on smooth, crinkled, flat or curved surfaces—Meyercord Decals are the smart, modern method of product identification. Give your products new eye-appeal and buy-appeal. Identify and beautify them with Meyercord Decals. Address inquiries to Dept. 14-8.

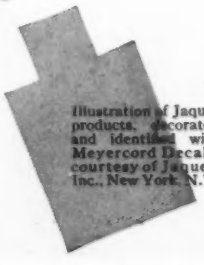


Illustration of Jaquet products, decorated and identified with Meyercord Decals, courtesy of Jaquet, Inc., New York, N.Y.

Meyercord Decals

THE MEYERCORD CO., CHICAGO 44, ILLINOIS

The Cosmetic Trend

Measured in terms of profitable square feet of floor and counter space toilet goods rank high in retail store economy. Although taking only a comparatively small corner in the floor set-up of the average department store they contribute nearly 4 per cent to the annual takings and there has been little change in this all through the war. Besides, there is the regularity of the following of the counter. Toilet goods are notoriously good repeaters. Strange as it may appear, the very attractiveness of the toilet goods counters for the store clientele is making for the incongruous situation that some store groups place them in the fore of their sales display while another group prefers to hide them away in odd corners.

There is a growing conviction among department store buyers that the post-war cosmetic market will not be quite as uneventful as it looks for the present. If, as it is rumored, the large drug manufacturers should branch out into the production of toilet goods either by adapting existing drug articles to cosmetic uses or by establishing completely new lines, or buying old ones, this will introduce new forces into the cosmetic business and many new products will appear upon the counters, even if they are not strictly speaking novelties. Department store buyers have no doubt that they will be getting their share of this new business. However, they do not want to be caught napping. It is not a question just of easy access to the counters. The problem in some localities is whether the stores can continue the exclusiveness that has been maintained for their toilet goods counters or must operate them along more popular lines.

The problem facing the buyers is how they can meet these new trends and still keep up, or possibly even raise, the square foot profit return.

Paperboard Order

The long-awaited order on boxboard has finally come out and, although it arrives too late to affect packages entering into the market this year, it is announced that it is the War Production Board's hope to save 73,000 tons of board a year through this order. The order comes as an amendment as of July 24 to L-239 and affects set boxes, display boxes and, in general, all folding and set-up boxes.

"The prohibitions and restrictions of this order do not apply to boxes completely manufactured or made from work in process prior to the effective date of the restrictions. Work in process means any material for physical incorporation in boxes on which actual box making operations have been started. No preparatory work such as art work, engravings, electrotypes, dies or forms shall be deemed work in process.

Other changes which are of particular importance to this industry are:

"A set or combination box is defined as any box which contains two or more different articles.

"The manufacture of any box for simultaneous packaging and display purposes is prohibited unless it is made without display features that require additional paperboard.

"No person shall manufacture any set or combination box without permission from the War Production Board in writing. The War Production Board will grant permission to manufacture set or combination boxes only in cases which involve no additional consumption of board over the quantity required to pack the items separately, or in cases where the resultant greater utility to the consumer is commensurate with the additional use of board involved.

"No person shall knowingly manufacture boxes for sale at retail as empty boxes.

"No person shall manufacture any box not covered by specific caliper or weight restrictions in this order unless it is made: (1) of paperboard no heavier than that reasonably required to transport the product with safety; (2) no larger than is necessary to pack the product; (3) without extension edges, top or bottom cards, or padded tops, if the construction used requires an extra sheet of paperboard or an extra head.

"No person shall accept delivery of any quantity of boxes which will increase his inventory of that size and type of box to more than 25 tons or more than his reasonably anticipated requirements for the next ninety days, whichever is greater. No person shall order any quantity of boxes for delivery to him, or for his account, on any future date, if he has reason to believe that receipt thereof on that date will increase his inventory to more than the amount permitted in the first sentence of this paragraph. No person shall deliver, or accept an order for, any boxes which he has reason to believe will increase the purchaser's inventory to an amount greater than that permitted by this order."

Packaging for Air Cargo

Although air express rates have consistently been reduced to the present figure of 70 cents per ton mile that rate is still about six times that of rail express according to Melvin D. Miller of American Airlines. Quite probably this will be reduced during the post-war transition period to approximately 60 per cent of their present level and at the same time air freight service will be introduced at somewhat lower rates, he continued.

There are three major reasons why air cargo will bring about changes in packaging methods:

1. Shippers will demand packaging that fits the requirements of air transportation and that enables them to realize the fullest possible benefits from its use.
2. In air transportation, weight is the prime factor to a greater extent than in any other form of transportation and the greatest possible reduction of tare weight is imperative.
3. Air shipments will not be subjected to as many possibilities of damage as are shipments in other forms of transportation.

Lightness in weight must be the first consideration in studying air packaging requirements. Here I want to say that I hope research on this subject can move ahead at a rapid pace because during this war, when we are so short of equipment, and when conservation of transportation facilities is so vitally important, we need to eliminate all useless weight.

It is definitely true that during flight, shipments are not subjected to as many stresses and strains or as many possibilities of damage as when moving in surface transportation, and in our Air Express Service today they certainly also receive more careful handling on the ground at airports than in normal surface transportation. On the other hand, a percentage of the packages moved by air will originate in or terminate in surface transportation because they come from or go to off-airline points, and they therefore meet some of the unusual hazards of surface transportation, but, fortunately, for a much shorter time and distance

Air transportation does not normally subject a package to as many handlings as it gets in surface transportation, and therefore, wear and tear is saved. This will be particularly true in international air transportation.

HOW MUCH DO YOUR INITIALS WEIGH?

Amazingly accurate measurements assist research's quest for better glass

PERHAPS no improvement in the making of fine glass is more striking than the amazingly accurate and delicate measurements now employed in weighing ingredients. For generations, materials were portioned out by "rule of thumb"—a cartload of that, a shovelful of this.

All that has been changed. Although glass is produced in larger quantities than ever before, every ingredient is measured accurately, by devices of extreme precision. To maintain this same relative accuracy in small laboratory batches weighing a pound or less, minute and precise measurements are necessary. In Armstrong's glass laboratories, for example, the balances in daily use for weighing experimental batch ingredients, and for other experimental work, are so sensitive that they can actually measure the weight of initials penciled on a piece of tissue paper! (Those in the picture weigh 0.0000704 ounce.)

Naturally not all measurements in glassmaking, even in the laboratories, are carried out to a fraction of an ounce. But it nevertheless is true that in Armstrong's glass factories, where commercial batches are mixed in ton quantities, ingredients are measured with a care and accuracy undreamed of in glassmaking even a few years ago.

This meticulous care and attention to detail, governing all Armstrong's work, is one of the big reasons for the consistently high quality of Armstrong's ware.

Other unusual stories of the care, experience, and skill that go into the making of fine glass are told in Armstrong's illustrated booklet, "Men and Glass." For your free copy, write to Armstrong Cork Company, Glass and Closure Division, 3808 Prince Street, Lancaster, Pennsylvania.

ARMSTRONG'S GLASS

and **ARMSTRONG'S CLOSURES**

All Plastic
LIPSTICK CONTAINERS

Swivels..

ILLUSTRATIONS ACTUAL SIZE

Push-ups..

HARRY BRODER
AND ASSOCIATES
5 EAST 47th STREET
NEW YORK 17, N. Y.
PLAZA 8-0520

WIRE OR WRITE FOR SAMPLES

And you feel better—faster, when you take gentle, speedy Sal Hepatica. Manufactured and distributed by Bristol-Myers Company, New York, this carefully blended, effervescent saline combination is highly efficacious as a laxative, cathartic or aperient. The neat, trim Sal Hepatica jar is a familiar sight in millions of American homes. And like so many well known products, it is securely sealed with a Crown Lug Cap.

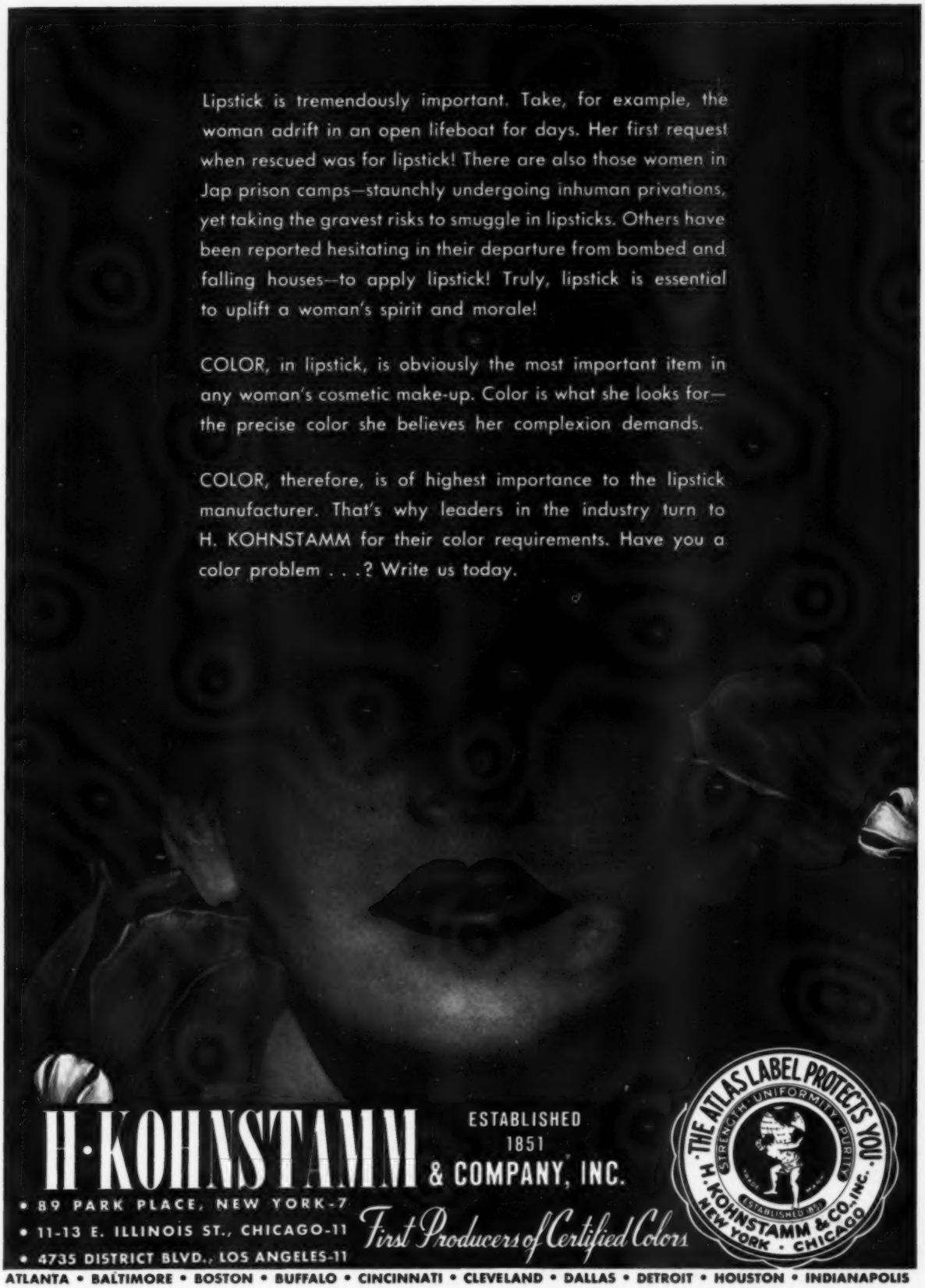
CROWN CORK & SEAL COMPANY

Closure Division • *Baltimore-3, Md.*

WORLD'S LARGEST MAKERS OF METAL CLOSURES

CROWN CLOSURES

Crown's Wartime Policy: *To supply closures, containers and services for packaging foods, beverages, chemicals, etc., needed by civilians and the armed forces. To build an ever-increasing volume of vitally needed weapons of war for our fighting men.*



Lipstick is tremendously important. Take, for example, the woman adrift in an open lifeboat for days. Her first request when rescued was for lipstick! There are also those women in Jap prison camps—staunchly undergoing inhuman privations, yet taking the gravest risks to smuggle in lipsticks. Others have been reported hesitating in their departure from bombed and falling houses—to apply lipstick! Truly, lipstick is essential to uplift a woman's spirit and morale!

COLOR, in lipstick, is obviously the most important item in any woman's cosmetic make-up. Color is what she looks for—the precise color she believes her complexion demands.

COLOR, therefore, is of highest importance to the lipstick manufacturer. That's why leaders in the industry turn to H. KOHNSTAMM for their color requirements. Have you a color problem . . .? Write us today.

H·KOHNSTAMM ESTABLISHED 1851 & COMPANY, INC.

• 89 PARK PLACE, NEW YORK-7
• 11-13 E. ILLINOIS ST., CHICAGO-11
• 4735 DISTRICT BLVD., LOS ANGELES-11

First Producers of Certified Colors

THE ATLAS LABEL PROTECTS YOU · STRENGTH · UNIFORMITY · PURITY · ESTABLISHED 1851 · H. KOHNSTAMM & CO. INC. · NEW YORK · CHICAGO ·

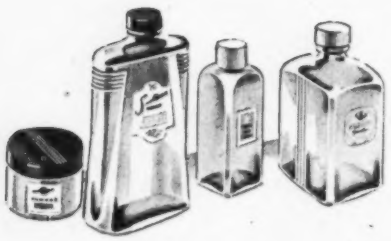
ATLANTA • BALTIMORE • BOSTON • BUFFALO • CINCINNATI • CLEVELAND • DALLAS • DETROIT • HOUSTON • INDIANAPOLIS
KANSAS CITY, MO. • MINNEAPOLIS • NEW ORLEANS • OMAHA • PHILADELPHIA • PITTSBURGH • ST. LOUIS • SAN FRANCISCO

"Let's make a date!"

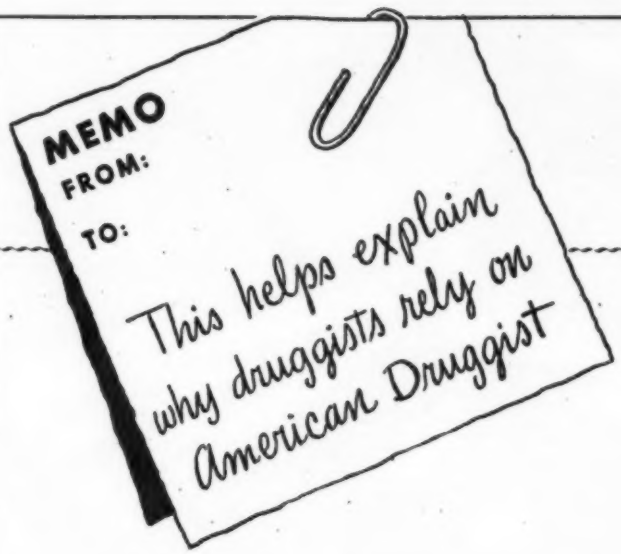
Your postwar plans probably dovetail with ours . . . your plans call for more attractive packaging to help build sales in postwar competition . . . our plans call for smart new stock designs in brilliant Maryland Bottles and Jars . . . Let's make a date . . . for V-day!

Maryland

BOTTLES & JARS



MARYLAND GLASS CORPORATION, BALTIMORE-30 . . . 270 Broadway, NEW YORK-7 . . . Berman Bros., Inc., 1501 S. Laflin St., CHICAGO-8 . . . H. A. Baumstark, 4030 Chouteau Ave., ST. LOUIS-10 . . . J. E. McLaughlin, 401 Lock St., CINCINNATI-2 . . . Owens-Illinois Pacific Coast Co., 135 Stockton St., SAN FRANCISCO-19 . . . Aller Todd, 1224 Union Ave., KANSAS CITY-7 . . . S. Walter Scott, 608 McCall Bldg., MEMPHIS-3



American Druggist

Now What? FROM WASHINGTON

Little business—the druggist in this case—is just as conscious of Washington power and influence as big business.

But whereas big business keeps closely in touch with things through various associations, through representation in the Capital and by subscribing to letter services, these are luxuries which little business cannot afford.

To supply the druggist with accurate and prompt forecasts of coming events and to anticipate trends in legislation and administration which may affect him, is the express purpose of our column called "Now What? From Washington".

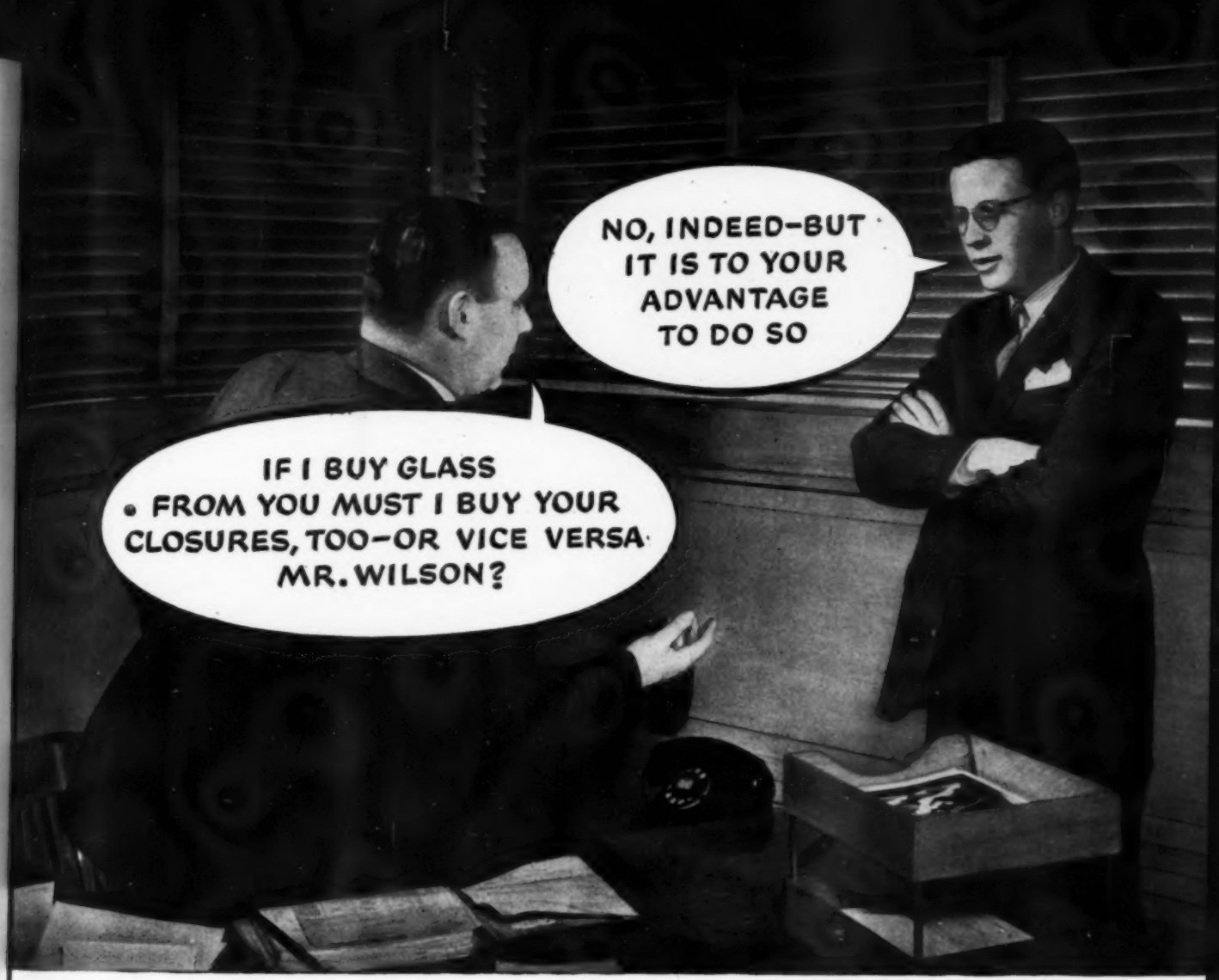
If you will read this month's column, *through the eyes of the druggist*, I think you will understand why "Now What? From Washington" is the most popular, best read feature in AMERICAN DRUGGIST.

It epitomizes, it seems to me, our editorial philosophy. We speak for the best interests of 55,000 druggists, who as human beings engaged in both a trade and a profession, are quite capable of deciding their own destiny—provided they understand both the pros and cons of the questions that face them.

John W. McFherrin
EDITOR

GAIR BY AIR
New York to San Francisco 17 hours—New York to Hongkong 44 hours. Distance is no longer measured by miles but by minutes. Because weight is a first consideration, Gair products play a vital part in the field of ever narrowing horizons. New merchandising methods, bringing an unprecedented need for Gair Corrugated Boxes—assure maximum air cargo at minimum tonnage.
GAIR
Write for Booklet "Air Cargoes"
Save Waste Paper for war production

ROBERT GAIR COMPANY, INC., NEW YORK • GAIR COMPANY CANADA LIMITED, TORONTO
Folding Cartons • Box Boards • Fibre and Corrugated Shipping Containers



Anchor Hocking offers a complete line of standardized amber and crystal glass containers of every size and type, all light, strong, safe and economical—a container for every conceivable packaging purpose. And among the 5 types of Anchor metal and plastic caps suitable for drugs and chemicals, there is one best suited to your purpose—for dependable airtight, leakproof seals and numerous reseals if required. While both containers and closures are available separately, it will pay you to rely on Anchor Hocking for your *complete* package; for then the responsibility for your container and closure requirements is centralized in one reliable firm; supply and service are coordinated; time and money are saved; and the facilities of our completely equipped Experimental, Packaging Research, and Engineering Laboratories are available to you.

"Meet Corliss Archer" every Thursday Evening, entire coast-to-coast network CBS

W. F. WILSON, one of Anchor's ablest and most popular men, has been a member of the Anchor family for 17 years.

ANCHOR HOCKING
GLASS & CAPS
ANCHOR HOCKING GLASS CORPORATION · LANCASTER, OHIO

it's merchandising that sells your product

it's light in weight

it's strong, rigid, unbreakable

it's self-protecting

it's a display as well as a protection

it's colorful. it's clear or opaque

it's economical

it's ideal for post-war demands

IT'S LUSTEROID

LUSTEROID vials and tubes come in diameters from ¼" to 1¼" and in lengths up to 6". Cork, slip-on or screw-cap closures.

Write for post-war details

LUSTEROID CONTAINER CO., INC.

Formerly Lusteroid Division of Sillcocks-Miller Company

Office and Factory

10 W. PARKER AVENUE, MAPLEWOOD, N. J.

MAILING ADDRESS: SOUTH ORANGE, N. J.

How about your Post-war Rouge Boxes?

They'll be largely made of Plastics, of course. American women would see to that even if economy and colorful sales appeal didn't make Plastics a natural from your viewpoint anyway. Women are sold on the feel, and brilliance, and cleanliness of Plastics.

But the rush is going to be terrific! As one of the oldest and largest molders of closures, lipstick holders and containers for all types of cosmetics, we know. So let's talk things over now. Then, when things open up, you can be sure of the type of service that has made Kurz-Kasch a leader in the Plastic cosmetic packaging field.

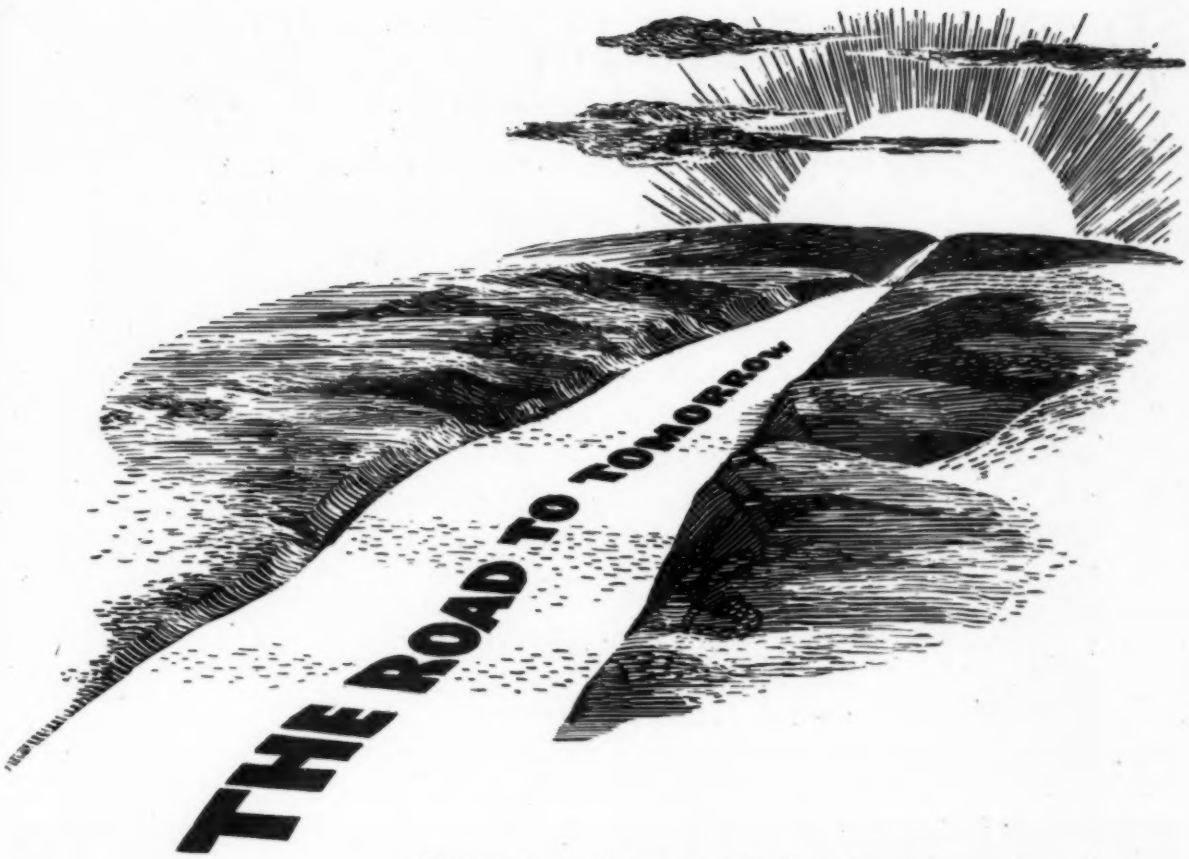
● Cosmetic packaging has been a specialty of ours ever since we originated the screw-top Plastic Rouge Box. Inquire about either stock or custom molds for all types of containers . . . for cream rouge, dry rouge, mascara, face powder or lipstick. No obligation.

Put your dollars in the fight — **BUY WAR BONDS!**

KURZ-KASCH

For over 25 years Planners and Molders in Plastics

Kurz-Kasch, Inc., 1421 South Broadway, Dayton 8, Ohio
Branch Sales Offices: New York • Chicago • Detroit • Indianapolis
Los Angeles • Dallas • St. Louis • Toronto, Canada
Export Offices: 89 Broad Street, New York City



TODAY, the road we are traveling is rough, rugged and rut-strewn. It leads, however, through the Arch of Victory to the broad highway of Tomorrow—where we shall once again be able to concentrate upon the details of perfection instead of the demand for increased production.

Solving of wartime problems has not interrupted our constant search for improvements in methods and techniques. In fact, the two have gone hand in hand. Because of this experience, the postwar years hold promise of performance that will be even better than that on which Carr-Lowrey reputation was built.

CARR-LOWREY GLASS CO.

Factory and Main Office: BALTIMORE, MD.
New York Office: 500 Fifth Avenue
Chicago Office: 1502 Merchandise Mart

BRIDGEPORT...

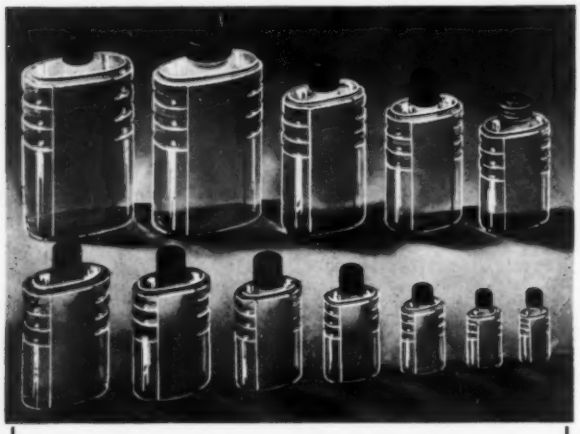
For the past two years our facilities have been devoted almost exclusively to the production of war materials. We have been fortunate, in that we have been able to handle this work on the same equipment used for our regular peace time products, and, consequently, when material again becomes available for lipstick containers, vanity cases and other metal cosmetic items we will be prepared to start producing our regular line immediately. If you too are planning your post war program, we will be glad to assist you.

THE *BRIDGEPORT* METAL GOODS MFG. CO.

Established 1909

BRIDGEPORT PHONE: BRIDGEPORT 3-3125 CONNECTICUT

VANITY CASES • ROUGE CASES • PASTE ROUGE CONTAINERS • LIPSTICK HOLDERS (ALL TYPES) • POWDER BOX COVERS • EYEBROW PENCIL HOLDERS • BOTTLE CAPS • JAR CAPS • METAL NOVELTIES TO ORDER



Available TODAY to Those Building for Tomorrow

"the 275 line"

1 DRAM TO 33 OZ. INCLUSIVE

★ Generally available . . . always acceptable . . . recognized coast to coast as one of the finest bottle lines! We can take limited business from those firms whose products will permit and whose inclinations will favor business relationship in the future. Please state sizes, quantities, and product to be packed.

W. BRAUN CO.

302 N. CANAL ST. CHICAGO, ILL.

A MONTHLY NEWS ANALYSIS-FORECAST

Complimentary to Folding Carton Users

EMPIRE CLOSE UPS

By Upton Close

HOLLYWOOD CALIF.

TO STIMULATE PERSONAL JUDGMENT

Empire BOX CORPORATION

Offices—Garfield, N. J., Palmolive Bldg., Chicago
Plants—Garfield, N. J., South Bend, Ind. Mills—Stroudsburg, Pa.

SHEET METAL GOODS

SPRINKLER TOPS

CORK TOPS DOSE CAPS

CONSOLIDATED FRUIT JAR COMPANY

NEW BRUNSWICK, N. J.

If you want LASTING

transparent containers—

(beautiful—featherweight—seamless—and shatterproof)

try Clearsite* VIALS

Of course you want your product to be attractively packaged. Nice looking containers have been—up to now—fragile, brittle, unable to survive the casual impacts of handling.

But when you CAN combine the beauty of lustrous transparency, with the utility of shatterproof protection, why put up with less? Shatterproof, resilient Clearsite labelled in process of manufacture gives you outstanding eye-appeal; positive protection. Clearsite advantages have been utilized in packaging minerals, pharmaceuticals, first aids, hardware, instrument parts, oils, cosmetics, etc.

Our Package Design Staff will gladly collaborate with you—without obligation.

Registered U. S. Pat. Office*

CELLUPLASTIC CORP.

CELLUPLASTIC CORPORATION

EXTRUSION AND INJECTION MOLDERS

60 AVENUE L NEWARK, N. J.

WEST COAST REPRESENTATIVES. CONTAINER SERVICE CO., 1266 North Western Avenue, Los Angeles 27, Cal.

NEWS

Penick Buys Compagnie Duval

S. B. Penick & Co., New York, has announced that it has purchased Compagnie Duval. The Duval company which was established in 1914 deals in perfume specialties, flavor concentrates and allied products, and, according to Penick officials, the Duval personnel will continue to serve its many foreign and domestic customers, and will become a unit of the Penick Essential Oils and Aromatic Chemicals Division.

Hall Joins Whittaker, Clark & Daniels

James H. Hall has joined Whittaker, Clark & Daniels to head up the Cosmetic Sales and Research Department of that company. Mr. Hall recently resigned from Pond's Extract Company after ten years as director of research of that company. He is widely known in

J. H. HALL

the cosmetic manufacturing industry and was closely associated with the development of the Scientific Section of the Toilet Goods Association.

R. L. Lund Retires from Lambert

Robert L. Lund retired July 1 as executive vice-president of the Lambert Pharmacal Co., St. Louis. He has been a member of the executive committee of the Proprietary Association for a number of years.

Val Kolb Succeeds Berg in Winthrop

P. Val Kolb has been appointed director of the special markets division of Winthrop Chemical Co., Inc., succeeding William H. Berg who resigned June 30. He has been associate director of Winthrop's special markets division in charge of vitamin sales since 1940.

P. VAL KOLB

Shortly after World War I Mr. Kolb joined the Swann Chemical Co. of Birmingham, Ala., and was sent to St. Louis as sales manager when the company acquired the Provident Chemical Works. He became vice-president and general manager of the latter company in 1925 and president in 1932.

From 1935 to 1938 Mr. Kolb was associated with the American Agricultural Chemical Co. of New York.

Committee to Pick Kelly's Successor

A special committee has been appointed to consider the question of finding a successor to Dr. E. F. Kelly as secretary of the American Pharmaceutical Association. Members of the committee are: B. V. Christensen, Columbus, Ohio, chairman; H. A. B. Dunning, Baltimore; R. L. Swain, New York; H. H. Shaefer, Brooklyn, and P. H. Costello, Chicago. The committee will submit its recommendations to the council of the A. Ph. A. as soon as possible.

Berg Joins Borden Co.

William H. Berg has been appointed general manager of the prescription products and industrial chemical divisions of the Borden Co., it has been announced by Charles F. Kieser, vice-president of the company.

Mr. Berg is prominent in the field of vitamin research and production and is

WILLIAM H. BERG

a member of the executive committee now engaged in formulating plans for a National Vitamin Foundation. His method of bread enrichment is now in national use and he has a number of inventions in the pharmaceutical field to his credit.

He is a graduate of Sheffield Scientific School of Yale University and learned manufacturing methods in business with his father. In 1925 he joined White Laboratories as treasurer and assistant general manager, and was responsible for the entrance of the company into the vitamin field. In 1931 he was made president and general manager. Mr. Berg resigned from White Laboratories in 1938 and shortly afterwards became associated with Sterling Drug Inc. and was vice-president of several of its affiliates, until his resignation last month.

Scott with Tone

Tone Laboratories, Inc., New York, has announced the appointment of Herbert Scott as general manager. Mr. Scott was formerly production manager of Parfums Schiaparelli, Inc.

Macauley Named Pro-phy-lac-tic V. P.

Charles M. Macauley, formerly New York district sales manager for Pro-phy-lac-tic Brush Co., Florence, Mass., has been elected a vice-president of the company.

NORMAL LIVES FOR DIABETICS . . .

thanks to Insulin!

A diabetic today, thanks to insulin therapy, is usually able to take his place in the home and in the community, and lead a normal life. This may be attributed to the marked progress in the refinement of insulin and insulin therapy, as practiced by the present generation of physicians.

Today the average diabetic child of ten may be expected to celebrate his fiftieth birthday. Without insulin, he would have been doomed in little more than a year. An adult at the age of thirty, stricken with the disease, may expect to live twenty-seven and a half years longer. Prior to insulin, his chances for life were a little more than six years. Even at the age of fifty, average life expectation is fourteen and a half years, which is 50% more than in the pre-insulin days.

And these added years can be active ones, not years of invalidism.

This increased span of life is due to advances made by medical science and to the research work of pharmaceutical houses, from which come countless modern-day drugs to protect life, from babyhood to old age.

Many of these products began with a fine chemical, or several fine chemicals, of exacting purity. And the purity of the fine chemical assured the quality and efficacy of the product.

For nearly 40 years Baker has built its chemical business on measured purity. That is why leading pharmaceutical and drug companies choose Baker as a source of supply. They know that Baker's purity by the ton in fine chemicals is the result of unique control methods and ceaseless testing.

Today this measured purity helps in countless ways to widen the span of living.

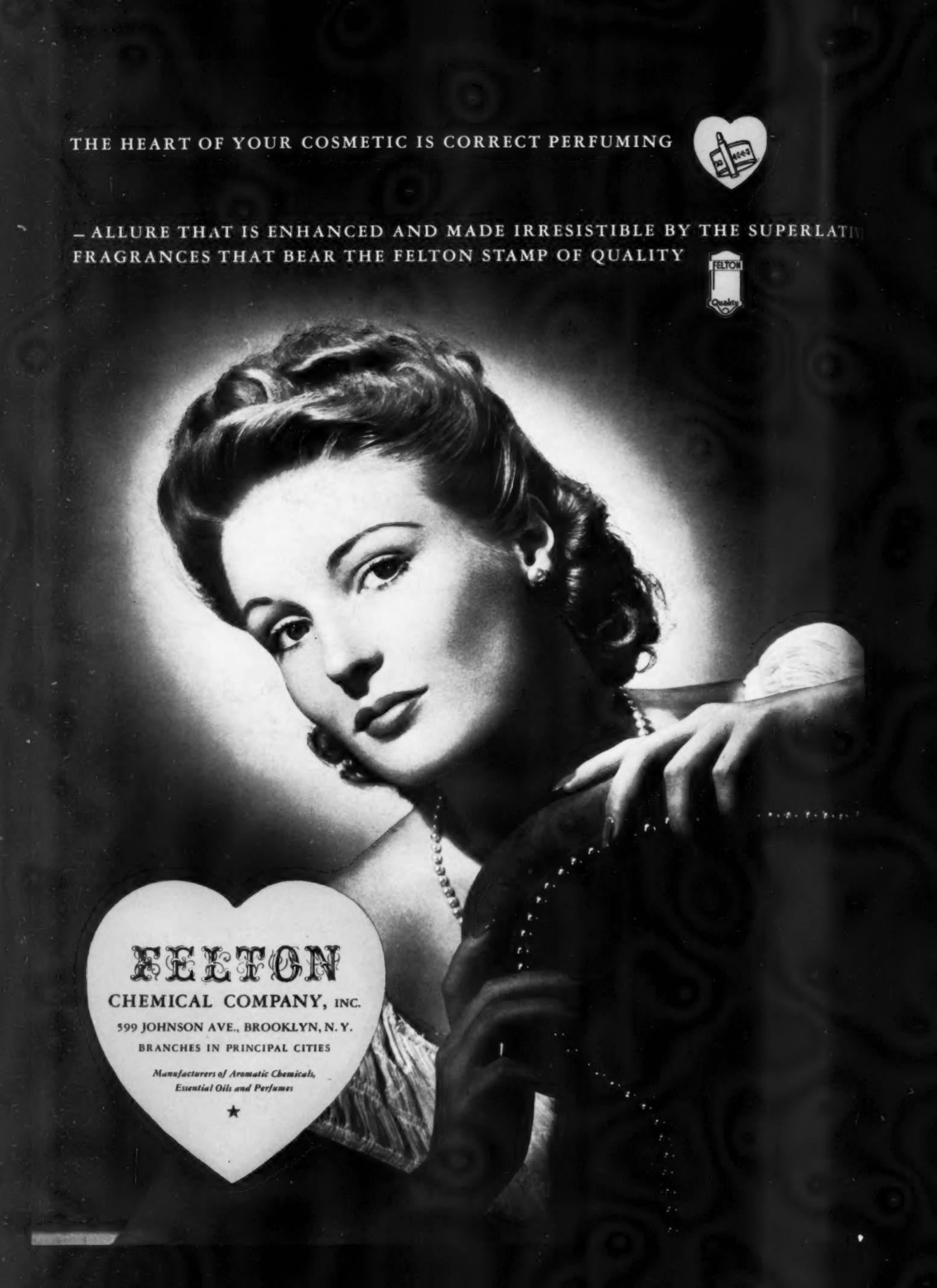
J. T. Baker Chemical Co., *Executive Offices and Plant:* Phillipsburg, N. J.
***Branch Offices:* New York, Philadelphia and Chicago.**

For Victory Buy United States War Savings Bonds and Stamps

Baker's fine chemicals

THE HEART OF YOUR COSMETIC IS CORRECT PERFUMING

– ALLURE THAT IS ENHANCED AND MADE IRRESISTIBLE BY THE SUPERLATIVE
FRAGRANCES THAT BEAR THE FELTON STAMP OF QUALITY



FELTON

CHEMICAL COMPANY, INC.

599 JOHNSON AVE., BROOKLYN, N. Y.

BRANCHES IN PRINCIPAL CITIES

Manufacturers of Aromatic Chemicals, Essential Oils and Perfumes

★

Max van Pels Opens Offices

Max van Pels has opened offices at 441 Lexington Ave., New York, for the importation and exportation of drugs, chemicals, botanicals, gums. etc.

Mr. van Pels was formerly associated with the New York office of

MAX VAN PELS

Stauffer Chemical Co. and has been connected with the chemical field for over thirty years.

Heyden Contract Increased

Jesse Jones, Secretary of Commerce, has announced that the Defense Plant Corporation has authorized an increase in its contract with Heyden Chemical Corp., New York. Additional facilities will be provided at the Princeton, N. J. plant. This brings Heyden's overall commitment to approximately $2,560,000.

Sonneborn Data Files

A new series of eight technical data files has been prepared by Dr. Erich Meyer, director of the department of industrial research, L. Sonneborn Sons, Inc., New York, to provide useful information on various petroleum products for manufacturers of household sprays, cattle sprays, corn earworm oils, protective creams for industry, brushless shaving creams and other specialties.

The technical data folders are standard file cabinet size and may be used for filing all essential data on the subject of the particular file. Data on the front of the folder covers properties, principle of formulation and commercial preparation of the product. Some of the folders also contain pertinent inserts.

Copies may be obtained, without charge, by writing to the department of industrial research, L. Sonneborn Sons, Inc., 88 Lexington Ave., New York 16, specifying the type of manufactured product for which data is desired.

Aug. '44: 55, 2

Rogers Joins Mixing Equipment

Mixing Equipment Co., Inc., Rochester, N. Y., has announced the appointment of Edgar A. Rogers as exclusive representative in Georgia, Alabama and the major portion of Tennessee.

Mr. Rogers received his technical education at the University of Arizona and Cornell University where he received the degree of Mechanical Engineer. In World War I he served as a lieutenant in the Air Service, having previously been a pilot with the French Air Forces.

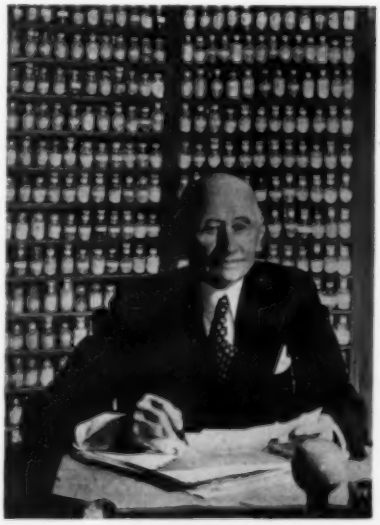
For many years he has been engaged in consulting and sales work in the chemical and process industries. He will make his headquarters in the Chattanooga Bank Building, Chattanooga.

Schering Charges Infringement

Schering Corp. has filed suit in the United States District Court for the Southern District of New York against National Synthetics, and manufacturers of Dikol. Schering charges that Dikol is an infringement of its patent covering Priodax.

Hopkins Named Honorary Member

By unanimous vote, the New York Board of Trade has elected J. L. Hopkins, dean of the drug industry, an honorary vice-president, in recognition of his many years of distinguished service to that body, and "as a symbol of the esteem in which he is held by the board." The new honorary vice-president is president of J. L. Hopkins & Co., New York.



J. L. HOPKINS

Miles Heads Colgate New Products

Gilbert D. Miles has been appointed manager of the new products department of Colgate-Palmolive-Peet Co., it has been announced by Roy W. Peet, vice-president. He has been with the company since 1937.

GILBERT D. MILES

Mr. Miles entered the cosmetic industry on the west coast where he designed and supervised the installation of a plant said to be the first in the world for the production of natural essence of gardenia. He has contributed to scientific publications and is a holder and co-holder of several United States patents.

Conover Joins Sonneborn

J. N. Conover has joined the white oil division of L. Sonneborn Sons, Inc., New York, as assistant to R. W. Bjork, sales manager of the division. Before joining Sonneborn, Mr. Conover had been engaged in special sales work with Gallowhur Chemical Corp., and prior to that was for nineteen years with Stanco Distributors, Inc.

Owens Can Advances Burns and Thayer

Earl Burns has been made manager of the Chicago branch of Owens-Illinois Can Co. For the past several years Mr. Burns has been in charge of the company's Baltimore branch. J. Thayer who has been acting manager of the New York branch for several months has been named manager.

Peek & Velsor Move

Peek & Velsor, botanical drugs, moved to new and larger quarters at 110 William St., New York 7, on July 31. The telephone numbers are REctor 2-5452-3-4. The offices are on the twentieth floor of the building at William and John Streets.

Looking at a flower through X-ray eyes—

As the X ray penetrates to and through the heart of a fragile flower, just so are the deft skills and the long experience of Dow technicians applied in seeking out the very essence of floral beauty for many aromatic chemicals.

SYNTHETIC

AROMATICS

DOW

CHEMICALS INDISPENSABLE TO INDUSTRY AND VICTORY

THE DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN

Penick Named Bank Director

S. Barksdale Penick, Jr., president of S. B. Penick & Co., has been elected a member of the board of directors of the Montclair Trust Co., Montclair, N. J.

Redanz Fifty Years with Fritzsche

Ralph R. Redanz is the third member of the Fritzsche organization to celebrate his fiftieth anniversary with the company. The first was William A. Welcke, vice-president and treasurer, in 1935, and the second was Frederick H. Leonhardt, president in April, 1944.

When Mr. Redanz joined Fritzsche Brothers in 1894 the company occupied modest quarters on Barclay Street and the office, sales and factory force totaled about thirty employees. In the fifty years that followed, he saw the staff grow to nearly ten times its original number.

Mr. Redanz was honored at a banquet in the Jansen Suite of the Waldorf-Astoria, July 14, by the company's officers and by members of its Quarter of a Century Club. Mr. Leonhardt presented him with a framed testimonial carrying a resolution adopted by the Board of Directors. A substantial government bond was presented to him by Mr. Welcke as a gift from the company. George L. Ringel, vice-president, who also is approaching the half-century milestone, and Miss Mary Neary presented respectively a gold wrist watch from the officers and directors and a solitaire diamond ring from his associates and employees.

John Boyer—Chemical Consultant

The War Production Board has announced that John W. Boyer, chief of the Alcohol and Solvents Branch of the Chemicals Bureau, has resigned to establish himself in Washington as a consultant to the chemicals industry. He will be succeeded by Frank E. Bennett, chief of the Industrial Alcohol Unit of the Chemicals Bureau.

Mr. Boyer joined the War Production Board May 29, 1942, as a business specialist, having been called from his farm near Charlottesville, Va., where he had retired after twenty years in the chemical business. He formerly was connected with the American Cyanamid Co., Mathieson Alkali Works, Monsanto Chemical Co., Calco Chemical Co. and Solvay Process Co.

McKesson Advances Kelleher

Gerald W. Kelleher, formerly manager of the cost and records department, has been appointed sundries assistant manager of McKesson & Robbins, Inc., at the New York headquarters office. He succeeds F. W. McGibbon who has resigned because of ill health.

In his new position Mr. Kelleher, who has been with McKesson since 1930, serves as assistant to W. H. Blanc, sundries manager, under the general supervision of B. H. Badanes, vice-president in charge of purchasing.

George Hauser, manager of publications, assumes Mr. Kelleher's former duties, becoming manager of the publications and price records department.

Mrs. McVickar Joins Dorothy Gray

Appointment of Elinor Guthrie McVickar as advertising manager and director of Dorothy Gray Laboratories, has been announced by Edward Plaut,

ELINOR GUTHRIE McVICKAR

president, Lehn & Fink Products Corp. Mrs. McVickar has been associated with Harper's Bazaar for the past nine years, first as fashion editor and more recently as beauty editor. Prior to that, she was with Saks-5th Avenue in the advertising department.

Round Joins Ivey & Ellington

Howard S. Round has joined Ivey & Ellington, Inc., where he will specialize in the merchandising, promotion and market analyses of drug store products. For the last eight years Mr. Round has been associated with the Pepsodent Co. He resigned recently as that company's eastern sales manager.

Winthrop Industrial Relations

Blayney J. Barton has been appointed to the newly created position of director of industrial relations at Winthrop Chemical Co., Inc. He will make his headquarters at Rensselaer, N. Y., and will be responsible for all questions regarding management and labor, plant safety, personnel and plant protection.

For the past five years Mr. Barton has been a special agent for the Federal Bureau of Investigation, having been generally assigned to national defense. He was born in Beaver, Utah, and attended the University of Utah and George Washington University, Washington, D. C., from which he was graduated in 1938 with an LL.B. degree. He is a member of the bar of the District of Columbia and of Utah. Prior to his association with the F.B.I. Mr. Barton was attorney for the Reconstruction Finance Corp. for which he had worked while attending law school.

Representing over 200 years of continuous service with Fritzsche Brothers, George L. Ringel, vice-president; Frederick H. Leonhardt, president; Wm. A. Welcke, 1st vice-president and treasurer, and Ralph R. Redanz, assistant treasurer.

Ogden Promoted to Major

Stephen A. Ogden, formerly executive vice-president and director of Alfred Dunhill of London, Inc., and Mary Dunhill, Inc., has been promoted to the rank of Major in the United States Air Force.

MAJOR STEPHEN OGDEN

Major Ogden has been on leave of absence from the Dunhill organization since August 1942 when he entered the armed forces. He has been overseas since December 1943 and has been serving in the Italian campaign.

Effervescent Products Now Ames Co.

Ames Company, Inc., is the new name under which will be conducted all of the operations of the firm formerly known as Effervescent Products, Inc. Effervescent Products, Inc. was incorporated in Elkhart, Ind., February 13, 1930. As Ames Co., Inc., it will continue to manufacture pharmaceutical specialties, ethically promoted to the medical and allied professions.

Dunkel Wins Golf Championship

Paul A. Dunkel, Paul A. Dunkel & Co., Inc., runner-up for the Bergen County, N. J. amateur golf championship two years ago, a member of the New Jersey State Golf Association, and one of Bergen's best known golfers, is the new club champion at the Ridgewood Country Club.

Mr. Dunkel annexed the Ridgewood championships when he defeated Joe Mason in the 36-hole finals, 4 and 3, coming from behind to gain his victory.

Gardner in England

Thornton E. Gardner, chairman of Yardley & Co., Ltd., left the United States the middle of June to return to London. The New York office received a cable early in July announcing his safe arrival.

Cummings Resigns from Mallinckrodt

Harold F. Cummings resigned August 1 as divisional sales manager in charge of the sale of pharmaceutical chemicals and cosmetic chemicals for Mallinckrodt Chemical Works.

Following his graduation from the University of Wisconsin with a B.S. degree in chemistry-commerce, Mr. Cummings joined Mallinckrodt in July 1930. After the regular six months training period, he was a sales correspondent, handling the sales and merchandising of photographic chemicals and a limited number of industrial chemicals. After two years he was made a salesman selling the entire line of Mallinckrodt chemicals in Ohio, Indiana, West Virginia, Kentucky, Illinois and part of Tennessee. In 1936 he was made divisional sales manager in charge of pharmaceutical and cosmetic chemicals, the position he held until his recent resignation.

Mr. Cummings' future plans have not been announced as yet.

Salten—Maurella Chief Chemist

David G. Salten has been appointed chief chemist of Maurella Products Co., New York, makers of Mastin's Eye

DAVID G. SALTEN

Lifts, Xandra Bath preparations, and Lengyel's Essence Imperiale Russe. Dr. Salten will be in charge of research and product development, and control of raw materials and finished products.

Danvers Resigns from Wyeth

Robert S. Danvers has resigned as director of public relations for Wyeth, Inc., Philadelphia, to become advertising manager of "The War Doctor," a publication. Mr. Danvers was formerly advertising manager of Petrogalar Laboratories, Inc., Chicago, and was named to his public relations post shortly after American Home Products Corp. merged its ethical pharmaceutical companies to form Wyeth Inc.

Leonard Schultes—An Ensign

Leonard H. Schultes has been commissioned an ensign in the U.S.N.R. and left July 28 for indoctrination school at Fort Schuyler, New York.

Mr. Schultes is a graduate of the Wharton School of Commerce and

LEONARD H. SCHULTES

Finance, University of Pennsylvania. Following his graduation he joined the New York office of the Hewitt Soap Co. as special representative, calling on the drug and department store trade in metropolitan New York. For the past few years he has been sales manager of the New York office in charge of purchasing and packaging.

Thomforde Joins National Drug

E. S. Thomforde has been appointed assistant sales manager of the National Drug Co., Philadelphia. He was formerly with White Laboratories of Newark, N. J., where he spent six years in sales and detail work and two years as assistant director of professional service. Mr. Thomforde is a graduate of Denison University and has done graduate work in medicine at Northwestern University and Columbia University.

Com. Putnam to Return

Lieutenant-Commander Roger L. Putnam, chairman of the board of the Package Machinery Co. expects to be back from England on a short leave. Commander Putnam is assisting Admiral Kirk in charge of amphibious operations, and in this capacity took part in the Normandy invasion.

Many of the invasion craft that landed on the beaches of Normandy were equipped with the new Mark XVIII gyrocompass built by the Package Machinery Co. This is a new lightweight compass developed by Sperry Gyroscope Co. Sperry and Package Machinery Co. are the only prime contractors building it.

ADVERTISEMENT.—*This entire page is a paid advertisement.* *Prepared Monthly by U. S. Industrial Chemicals, Inc.*

U.S.I. CHEMICAL NEWS

August ★ A Monthly Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1944

New Modified Alkyd Offered by U.S.I. for Specification Paints

S&W Aroplaz 1375 Meets W.P.B. Phthalic Anhydride Restrictions

Announcement of a new ester gum-modified alkyd resin, for use in the specifications recently issued to meet current W.P.B. restrictions on phthalic anhydride, has been warmly received by formulators of protective coatings.

The new War Production Board directive, Order M-139, Direction No. 2. by further limiting the percentage of phthalic anhydride in the vehicle solids components of various specification coatings, has, in effect, made obsolete many government agency specifications. However, alternate specifications requiring resins of lower phthalic content have been issued; many of these, like those shown below, call for semi-alkyd resins, or alkyd resin-ester gum varnish blends.

U. S. I.'s new resin, S & W Aroplaz 1375, is a composite ester gum-modified alkyd specifically developed to meet these new specifications; it is now being used effectively as the total vehicle solid component in such specifications as these:

ARMY SPECIFICATIONS

3-171 Grade II, Primer, Synthetic, for Ferrous Metals

3-172A Grade II, Primer, Synthetic, Refinishing

3-173 Grade II, Enamel, Synthetic, Lustreless

3-174 Grade II, Enamel, Synthetic, Semi-Gloss

3-175A Grade II, Enamel, Synthetic, Gloss

NAVY SPECIFICATION

52-P-26 (Amend. of 6/1/44) Primer, Metal (Brown)

Polymerized to a high viscosity, S & W Aroplaz 1375, permits formulation of acceptable products containing maximum volatile content. This permits coating manufacturers to produce specification finishes at minimum raw material cost, with no sacrifice in quality.

Samples of the new resin and additional information on formulation can be obtained by writing to U. S. I.

Startling New Uses Loom for Today's "Miracle" Drugs

Broad Potentialities Seen in Recently Reported Cures with Penicillin, Atebrin, Sulfadiazine and Other Chemicals

With the discovery, in 1935, of the remarkable medicinal properties of the sulfonamides, chemotherapy came back into the limelight, renewing a march which has since turned into a veritable parade of new life-saving pharmaceuticals.

Official Photo U. S. Army Signal Corps

Military paints ranging all the way from stencil paints to the olive drab which marks the jeep the world over are being formulated with S&W resins. Of particular interest now is U. S. I.'s announcement of the new resin, Aroplaz 1375.

Glamorized as "miracle drugs" by the popular press, penicillin, atebrin, sulfadiazine, the vitamins, and other chemical compounds have won quick fame because an energetic chemical industry was able to push them into large-scale production almost overnight.

In less than a decade, production of sulfa drugs has leapt past the 10,000,000-pound mark. Atebrin, war-essential substitute for quinine, is now being produced at a rate which dwarfs previous world production of quinine. Vitamin production has skyrocketed into astronomical figures. And — when the full story can be told — the volume production of penicillin from a lowly mold will go down as one of the industry's big achievements.

New Cures with New Drugs

While volumes have been written about the capabilities of these new pharmaceuticals, one need only watch the current news to gain an idea of the unlimited horizons ahead. Penicillin, for example, finds a new use in the treatment of psittacosis, the deadly "parrot fever". Sulfadiazine is used to fight meningitis. Arthritis, widespread and stubbornly resistant to treatment, is now being successfully treated with penicillin.

In the field of food allergies, vitamin C is suggested as a cure. Pneumonia and empyema afford two further examples; formerly unaffected by penicillin, these diseases now yield to intrapleural injections. Even the irksome mosquito seems to be losing ground, large doses of vitamin B_1 being reported to immunize people against its bite.

U. S. I. Chemicals at Work

In the field of drug synthesis, U. S. I.'s ethyl acetoacetate is widely used in the preparation of such products as atebrin, vitamin B_1, sulfamerizine, antipyrine and amidopyrine. Diethyl oxalate is used in the manufacture of gamma-pyrones; ethyl sodium

(*Continued on next page*)

Penicillin Inactivator Facilitates Culture Study

Cultures taken from patients who have been receiving penicillin treatment can be materially improved by a new penicillin inactivator. The inactivator completely destroys the penicillin in the culture, thus permitting the culture to develop naturally.

Extracted from strains of *Staphyloccus aureus*, the inactivator is obtained by precipitating 24-hour saline cultures with acetone. After one change of acetone and two of ether, the precipitate is dried, powdered and stored at room temperature.

Ether-Air Mixture Proves Best for Cold-Weather Diesel Starting

Recent research has shed new light on the question of whether high cetane fuel blends give better cold-weather starting than "boosters" introduced into the diesel engine's air stream. The findings, reported in the S.A.E. Journal, are overwhelmingly in favor of the latter method.

The most effective fuel blend tested was obtained by adding 25 per cent ethyl ether to the diesel fuel; this gave far better results than did blends using butyl or hexyl ethers. But even ethyl ether only brought the starting temperature down to —5 deg. F.

When ethyl ether was directly introduced into the air stream of diesels, however, they started at temperatures down to —40 deg. F. In addition, partial combustion occurred immediately, relieving the battery of the major part of the starting load. The research further indicates that fear of fire from this method, expressed by manufacturers of crankcase scavenging diesels, has little basis in fact.

From hospitals at home to front-line first-aid stations, U. S. I. Pure Alcohol stands guard against infection. Perhaps the oldest medical chemical, alcohol is still the most widely used.

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August ★ **U.S.I. CHEMICAL NEWS** ★ 1944

Alkyd Resins Employed in New Calking Compound

A permanently plastic, nonshrinking, nonhygroscopic calking material suitable for sealing joints on aircraft, fuel tanks, etc., is described in a recent patent. An unmodified sebacic acid alkyd resin is the base in which an inert filler, formed mainly from asbestos filler and ground mica, along with a small percentage of zinc chromate, are mixed.

Zein Acetate Produces Strong, Flexible Films

Protective coating films of zein acetate are claimed to be stronger, more flexible, and more water-resistant than films of zein itself or plasticized zein, according to a British patent on a process for making the acetate.

The acetate differs from zein in that it is insoluble in ethyl alcohol. But it is soluble in mixtures of 95% ethanol with butyl lactate or ethylene glycol monoethyl ether. The mixture should contain 50 to 80% ethanol.

In the description of the process, acetic anhydride, acetic acid, acetyl chloride, and ketene are mentioned as suitable acetylating agents. Sulphuric acid or anhydrous sodium acetate are employed as catalysts.

New High-Antiknock Fuel

A recently granted patent describes a high-antiknock motor fuel consisting essentially of isoparaffinic motor fuel hydrocarbons, such as those produced by the alkylation of isoparaffins. The hydrocarbons are of the type that may be produced by alkylating isoparaffins with normally gaseous olefins and an aliphathic ester of formic or acetic acid, such as butyl acetate.

New Alternate for Shellac in Rubber Preservatives

A new compound, designed to take the place of shellac in rubber preservation lacquers is claimed by a German article to be both non-cracking and non-scaling. Vinnapas, a polyvinyl compound, is dissolved in either alcohol, hexane, acetone, ethyl acetate or butyl acetate. Pigment and resin are then added to produce a high-gloss, strongly adhesive black paste.

New "Miracle" Drugs

(Continued from preceding page)

acetone oxalate in making acetopyruvic acid; acetone as a source of chloroform.

Ethyl acetate and ethyl formate are among the starting materials in the manufacture of sulfadiazine. Indalone, U. S. I.'s powerful new insectifuge, serves as a vital ingredient in the government's new insect repellent.

Alcohol, ether, acetone and other solvents are used on a large scale in all types of extractions. Particularly important is the use of amyl acetate in the extraction of penicillin. Vitamins, hormones, alkaloids, glucosides and other drugs are still extracted in large amounts from natural animal and vegetable sources; here U. S. I. solvents are vital tools in extraction and purification. In analytical work, indispensable to control of both production and administration of pharmaceuticals, the same solvents are constantly used.

End-Product Uses

U. S. I. products are found not only in intermediate stages of pharmaceutical manufacture, but also in end products. Ether and ethylene are used in anesthesia. Ethyl formate is used internally as a remedy for diarrhea, as an inhalant for respiratory affections, and externally as a rubefacient. Urethan is used as an anti-spasmotic for convulsions, restlessness, etc., and as an antidote for strychnine, resorcinol and picrotoxin poisoning. It is also used as a co-solvent to increase the solubility of quinine hydrochloride in water. Alcohol, ether, and acetone are used in the manufacture of pill coatings. Sulfonamide films useful for treating burns and surface wounds have been prepared by spraying 50% acetone or alcohol emulsions of the sulfa drug with methylcellulose, triethanolamine and sorbitol on a glass surface and allowing to dry.

Alcohol is perhaps the most widely used solvent in the medical profession. Its germicidal properties make it invaluable in sterilization. It is also widely used as a vehicle for medicines and as an ingredient in ointments, lotions, antiseptics, etc.

Nerve Block

Alcohol, too is finding increasing use as a pharmaceutical end-product in therapeutic nerve block. A recent application of this technique is in the treatment of blood vessel spasm, a disease of old-age, which is both painful and dangerous. Where the age of the patient makes surgery hazardous, 95% alcohol is injected around the sympathetic nerve, bringing immediate relief.

TECHNICAL DEVELOPMENTS

Further information on these items may be obtained by writing to U.S.I.

A new resin adhesive designed to bond copper or copper alloys together is announced. According to the maker, it also bonds copper to other metals or non-metallic structural materials when co-bonding agents are employed. **(No. 837)**

U S I

Continuous plastic sheeting, up to 54 inches in width, is now produced in thicknesses from .030 to .25 inches. The surface is described as workable and unaffected by contact with gasoline, oils, acids, most alkalis, alcohol. Suggested postwar uses include luggage, wall paneling, flooring, table tops, house furnishings. **(No. 838)**

U S I

A new artificial leather, reported to exceed natural leather in strength and weather resistance and to be mildewproof, is announced. **(No. 839)**

U S I

Availability of a humectant for civilian use is announced. Valuable for stabilizing the moisture content of foods, cosmetics, adhesives and a wide range of other materials, the product is a hexahydric alcohol said to possess extremely low volatility, neutral reaction, bland taste, and other desirable properties. **(No. 840)**

U S I

Permanent sealing of riveted fuselages, fuel tanks, gun turrets and acrylic structures against leakage caused by severe vibration is the war purpose of a new sealing tape. Tape is insoluble in common solvents, such as aromatic aviation fuel, ethyl and butyl acetate, and resists hardening from prolonged exposure to air. **(No. 841)**

U S I

A new cleaning compound, which comes as a self-emulsifying, non-phenolic liquid, is said to remove grease, oil, smut, and drawing and buffing compounds from metals and painted surfaces. Used as supplied for dipping, spraying, or brushing, or as a water emulsion in washing machines. **(No. 842)**

U S I

Loosening rust-frozen parts is said to be facilitated by a quick-acting new penetrant oil. The product is also said to dissolve gum, dried grease and oil, and to remove rust and carbon deposits. **(No. 843)**

U S I

To aid carton re-use, a new "carton colored", opaque ink is offered to obliterate old stencils. It is claimed that the new ink completely covers the old markings and dries almost instantly after application by brush. **(No. 844)**

U S I

New rust preventive oils are offered in 14 grades. According to the manufacturer, the oils form protective coatings ranging from thin, transparent films to heavy, abrasion-resistant coatings of the water-proof variety. **(No. 845)**

U S I

To scent floor waxes, furniture oils, window cleaning fluids, insecticides and kindred products, a new, low-cost odorant is offered, with what is described as a powerful, clean, lemon-pine odor. **(No. 846)**

U S I

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Diamyl Phthalate
Dibutyl Phthalate
Diethyl Phthalate

OTHER ESTERS
Diethyl Carbonate
Ethyl Chloroformate
Ethyl Formate

INTERMEDIATES
Acetoacetanilide
Acetoacet-ortho-anisidide
Acetoacet-ortho-chloranilide
Acetoacet-ortho-toluidide
Acetoacet-para-chloranilide
Ethyl Acetoacetate
Ethyl Benzoylacetate
Ethyl Sodium Oxalacetate

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Ethyl Ether
Ethyl Ether Absolute—A.C.S.

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*Carbay Special Liquid
*Vacatone 40

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S&W Ester Gums—all types
S&W Congo Gums—raw, fused & esterified
S&W *Aroplaz—alkyds and allied materials
S&W *Arotehe—pure phenolics
S&W *Arotehe—modified types
S&W Natural Resins—all standard grades

OTHER PRODUCTS
Collodions
Ethylene
Ethylene Glycol
*Indalone
Nitrocellulose Solutions
Urethan

American Home Export Companies

As a step toward post-war expansion, American Home Products Corp. has formed two new companies to handle all its export business from the United States, it has been announced by Walter F. Silbersack, executive vice-president and general manager. The new organizations started operations August 1 under the direct supervision of Donald C. Townley, vice-president in charge of the foreign division.

One company, Wyeth International Ltd., will export pharmaceuticals, biologicals, nutritional products and vitamins produced by Wyeth Inc. and other American Home Products subsidiaries. Robert C. Hodgman is president of this company.

The other company, Home Products International Ltd., of which Mr. Townley is president and Elliott Warburton, vice-president, will handle export sales of the corporation's food, household, cosmetic and packaged drug products.

Heretofore the overseas sales of American Home Products were handled by the export division of the Kolynos Co. which is now a part of Home Products International.

The organizational structure of Home Products International Limited provides for four operating divisions—the Kolynos Division, (dentifrices, etc.) of which Harley B. Lewis is sales manager; Boyle-Midway Division, (household products) Gladys Liggett, sales manager; and Affiliated Products Division, (cosmetics) Benno Bornn, sales manager. Mr. Bornn is acting sales manager of the Packaged Drug Division.

The New York headquarters of both organizations are at 22 East 40 St.

G. D. Searle Plans Expansion

As part of an expansion program which will be carried out after the war or as soon as building restrictions are lifted, G. D. Searle & Co., Chicago, has purchased a 5½ acre tract in Skokie, adjoining its present property on which are located the Searle research and manufacturing laboratories. The purchase practically doubles the amount of land owned by the company.

At least one additional building will be erected to increase the research and manufacturing facilities. The present building completed in March 1942 is now inadequate because of the rapid expansion of business.

Commercial Solvents Plant Gets "E"

The Army-Navy "E" was awarded July 7 to the Dixie Ordnance Works, Sterlington, La., for its production of ammonia. The plant is operated for the government by Commercial Solvents.

New Depilatory and Leg Make-up

Martin Laboratories, New York, has announced the completion of a new depilatory and leg make-up. The new product is available to manufacturers and beauty salons in a convenient and time-saving powder form, which requires only the addition of water to make it ready for use. It is said to be odorless, safe and effective.

Billboard on which the pictures of Abbott employees who purchased extra bonds in the Fifth War Loan Drive were posted. Purchasers were eligible to win other bonds donated by Abbott Laboratories

Wright Retires from Armstrong

Howard E. Wright, New York district manager of the glass and closure division of the Armstrong Cork Co., is retiring after fifty-two years of service with the company. He will be succeeded by R. J. Fitzgerald, who has been Chicago district manager since 1939 and has had twenty-five years of experience with the company.

R. J. FITZGERALD

T. J. Ryan who has been associated with the company in the Chicago area for twenty-four years, becomes district manager there.

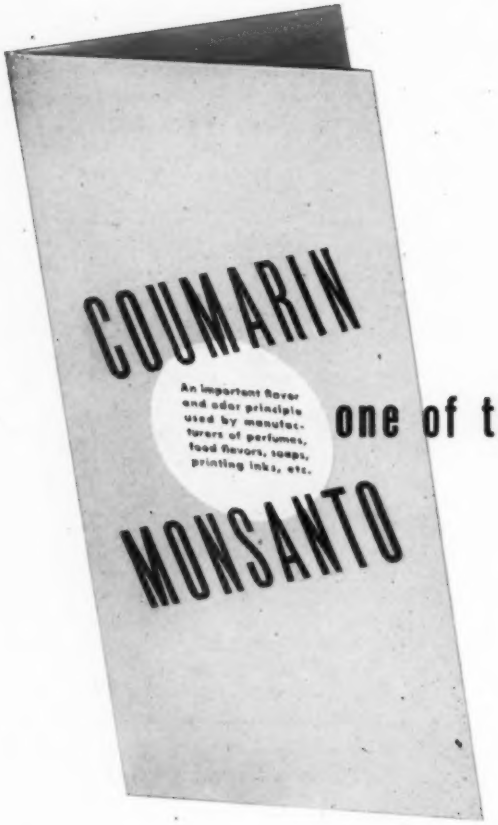
"E" to Plastic & Die Cast Products

The Plastic & Die Cast Products Corp., Los Angeles, was awarded the Army-Navy "E" at ceremonies held July 12. Roy L. Peat, president, accepted the award for the company and Betty Hastings and Theodore Neward accepted it for the employees.

Abbott War Bond Drive

The employees of Abbott Laboratories put on a four-day campaign to sell $50,000 in extra War Bonds in the Fifth War Bond drive. Extra war bonds and stamps were bought by 3,102 employees to make a total of $78,000.

A public address system was installed to bring up-to-the-minute news of Allied successes as received over a newspaper teletype machine. Posters captioned, "Be There With Extra War Bonds" were printed on the front pages of newspapers headlining Axis reverses. As a special feature, those purchasing extra bonds were made eligible to win a $100, a $50 or a $25 War Bond offered by the management. Entrants removed from a large board a capsule and posted in its place a miniature portrait of themselves which was taken by an automatic machine. The lucky capsules were drawn from a box during a dance held the last evening of the drive.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McKesson Advances Rosevear

Ronald H. Rosevear, since 1942 assistant secretary, office manager and accountant of the Portland (Ore.) division of McKesson & Robbins, Inc., has been appointed manager of the division to succeed Peyton Hawes, who has resigned to go into business for himself.

Mr. Rosevear has been associated with McKesson since 1937. He was born in Cornwall, England, attended the public schools in Ogden, Utah, and studied at the University of Utah, the Utah State Agricultural College and the American Institute of Banking.

WMC Advances Appley

Lawrence A. Appley, vice-president in charge of personnel planning and research of Vick Chemical Co. since 1941, has been appointed a member of the War Manpower Commission National Management-Labor Committee. He will serve as member at large.

For the last year and a half, Mr. Appley was associated with WMC as director of the Bureau of Placement and then became its deputy chairman. He resigned July 1 because of ill health. After a period of rest and recuperation, he will return to his post with the Vick company of New York and will assume his post as a member of the WMC Management-Labor Committee when he has completely regained his health.

Plastic Bottle Cap Maker

Warren Plastics Corp., Warren, Pa., has announced that it is going into the production of plastic bottle caps that are especially designed for the drug and cosmetic industry.

Continental Can Buys Cameron Can Machinery

Continental Can Co., Inc. has acquired for cash all of the capital stock of the Cameron Can Machinery Co. of Chicago, peacetime manufacturer of automatic machinery but at present engaged primarily in war production.

The Cameron Can Machinery Co. will operate as a subsidiary and the officers will remain the same—Allan M. Cameron, president; William M. Cameron, vice-president; and Robert K. Cameron, secretary.

Cold Wave Ingredient Plant

Stanton Laboratories, Philadelphia, manufacturer of concentrated thioglycolic acid and its sales for the biological and drug industries, has obtained a new plant in Jenkintown, Pa., where it will produce its new cold wave ingredient, "Thiomine," as well as the other thioglycolate products. The company's executive offices will remain in Philadelphia.

Procter & Gamble History

Procter & Gamble has published a very attractive fifty-page history of the company. It is generously illustrated with photographs and with paintings which have been reproduced in color. It is called "Into the Second Century with Procter & Gamble" and it tells the story of the company step by step since the partnership of James Gamble and William Procter was formed in 1837. Copies are available upon request.

Eddie Cantor and Nora Martin eat cafeteria style with Lee H. Bristol, vice-president of Bristol-Myers Co. at the opening of the Bristol-Myers Hillside, N. J., plant's Fifth War Loan Bond rally.

Fauser Joins Warner

Erwin Fauser, president and general manager of Frederick Stearns & Co., Detroit, at the time of its acquisition by Sterling Drug, Inc., has joined William R. Warner & Co., New York, as president of a new subsidiary which will market Sloan's liniment, "Non-Spi" and other proprietary preparations.

ERWIN F. FAUSER

Mr. Fauser has spent his entire business life to date with the Stearns organization which he joined as a clerk in the Detroit office in 1913. In 1924 he was made manager of the New York office and in 1927 was transferred to Sydney to become assistant manager of the Australian branch. In 1931 he was made general manager at Sydney and in 1941 became president and general manager of the company in Detroit.

Belth Joins Hopkins

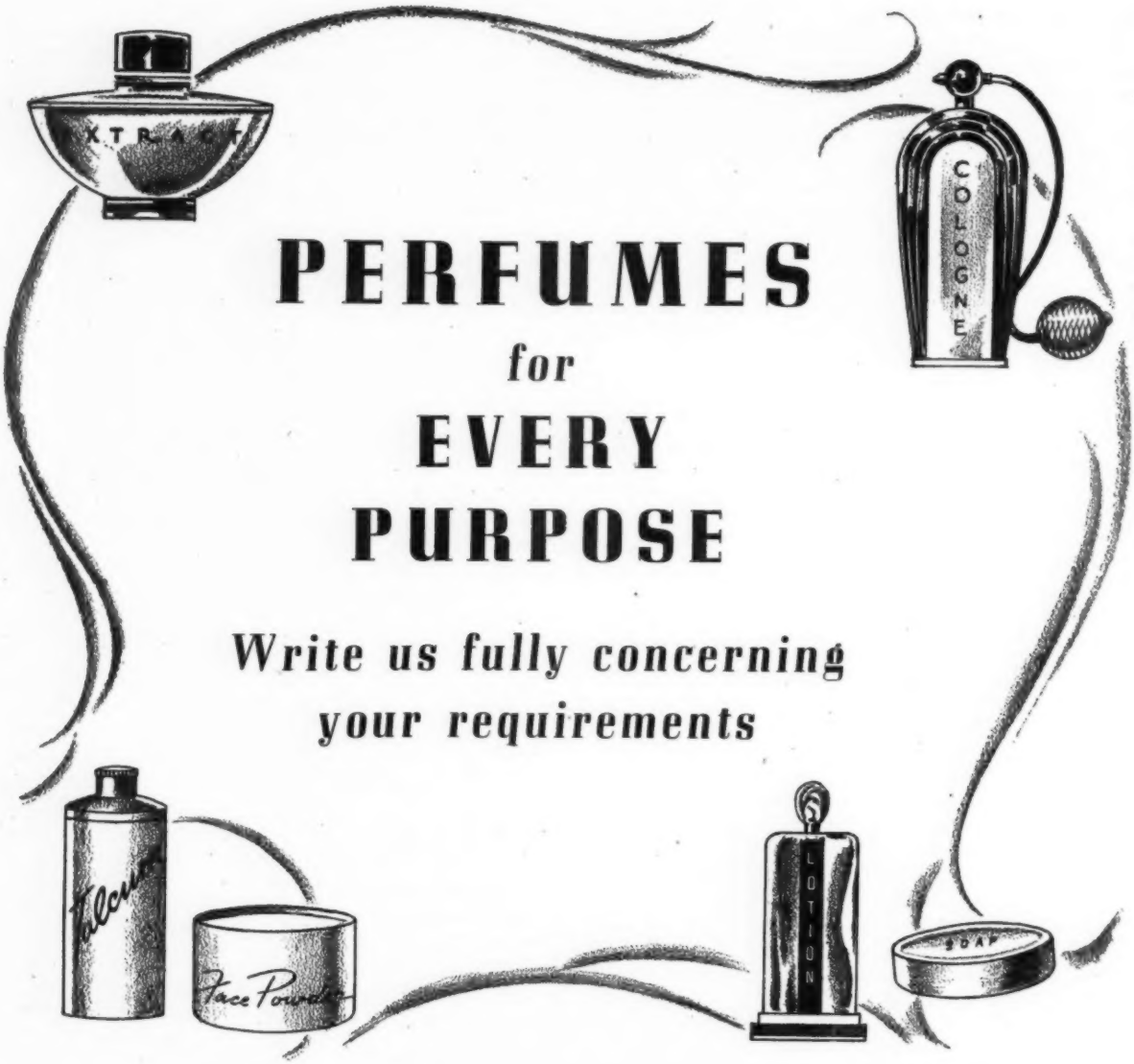
George Belth has joined J. L. Hopkins & Co., New York, as chemical engineer and general assistant to the president. For many years Mr. Belth was with Associated Chemical Laboratories and more recently he has been with Dr. H. L. Shoub, New York, as consultant.

Dr. Keenan Joins Standard Cap

Dr. John A. Keenan has been named executive vice-president of Standard Cap and Seal Corp., New York. He was formerly director of nutritional research with the Carnation Co.

Osterlund Heads Phila. Wholesale

O. S. Osterlund has been elected president of the Philadelphia Wholesale Drug Co., Philadelphia, succeeding the late H. Krupp. Henry V. DeHaven is vice-president; Russell T. Blackwood, Jr. general manager and Ralph B. Rorhman, assistant general manager. J. K. Aughinbaugh has been elected to the board of directors.



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Kalish Joins National Synthetics

Joseph Kalish, formerly technical editor of DRUG & COSMETIC INDUSTRY, and more recently with Revlon Products Corp., is now chief chemist and production manager of National Synthetics, pharmaceuticals, New York.

BIMS Golf Tournament

The BIMS held a golf tournament at the Winged Foot Golf Club, July 25. About 100 members played golf and prizes in the form of War Bonds were won by: John V. Cavalero, Stelz Co., Inc., grand prize; R. Rooks, Avon Products; Robert A. Kramer, Evans Chemetics, Inc.; C. Ferguson; Ray F. Ougheltree, Zonite Products Corp.; Frank A. Nicholson, Richardson Taylor-Globe Corp.; James A. Leyden, Hampden Glazed Paper & Card Co.; C. E. Hemingway; G. W. Sands, Richard Hudnut; R. J. Anderson; Alec J. Dedrick, van Ameringen-Haebler, Inc.; Harris Whitaker, Elizabeth Arden; Paul Miller, International Cellucotton Products Co.; Russell Boland, Drug Trade News; K. L. Patterson, Stanco, Inc.; Milton Small; Pierre Harang, Houbigant Sales Corp.; John E. Gabrielsen, Allied Products, Inc.; William F. Zimmerman; David J. Stewart, Jr., Yardley & Co.; Sewell H. Corkran, E. N. Rowell Co.-A. H. Wirz; William H. Green, Addison Lithographing Co.; Charles Mooney, Elizabeth Arden; Dudley Shaw, Allen B. Wrisley Co.; Henry F. Hermann; and Edward A. Bush, Bush Pan America Inc.

Following the dinner, Harry Welch, the original Popeye of stage and radio, entertained the golfers.

Mueller Heads St. Louis Assn.

At the annual meeting of the Drug, Chemical and Allied Trades Association of St. Louis, the following officers were re-elected for the current term: Paul Mueller, Missouri Box and Label Co., president; Fred C. White, Obear Nester Glass Co., first vice-president; Edward H. Baltzer, McKesson & Robbins Inc., second vice-president; Robert Rosenthal, Superior Folding Box Co., secretary-treasurer.

The club wound up its social activities for the season with a Salvation Army Benefit at the Little Theater of St. Louis in May, and a boat ride in July.

Obituaries

Henry Willis Phelps

Henry Willis Phelps, former chairman of the board of the American Can Co., died July 7 at his home in New York City after an illness of several months. He would have been eighty-one on July 28.

He was born in Lewiston, Ill., and was graduated from Williams College in 1886. In 1887 he entered the general canning business with the firm of Ranney & Phelps who made their own cans. In 1894, the canning end of the business was sold out and the can making department moved to Hoopeston, Ill., as the Union Can Co., which operated until 1901 when it was merged with American Can Co. At that time Mr. Phelps was elected a director of American Can and held that position until his retirement in 1941. He was elected president of the company in 1923 and chairman of the board in 1936.

Sperti display at the Chicago Associated Toiletries Salesmen Show, held at the Palmer House, Chicago.

Francis P. Gormely

Francis Patrick Gormely, president of the Electro Metallurgical Co., the Hayes Stellite Co. and several units of the Union Carbide & Carbon Corp., New York, died at his home in New Rochelle, July 13. He was fifty-six years old.

Harry Z. Krupp

Harry Z. Krupp, president of the Philadelphia Wholesale Drug Co., died July 3 at University Hospital, Philadelphia, after a heart attack suffered June 28. He was sixty-two years old.

Mr. Krupp started his business life with the Philadelphia Wholesale Drug Co. in 1902 as a clerk. In 1909 he was made treasurer of the company, in 1929 a director, and in that year he succeeded Frank R. Rohrman as general manager. In 1941 he became president upon the death of Russell T. Blackwood, and continued also as general manager.

Mr. Krupp was a former president of the Federal Wholesale Druggists Association, and a trustee of the Philadelphia College of Pharmacy and Science.

John J. Toffey, Jr.

Word has been received by the Aridor Co., Chicago, of the death of its former Cincinnati representative, Lieutenant Colonel John J. Toffey, Jr. Colonel Toffey was killed June 3 while leading his troops in the action which ended in the capture of Rome.

His war service began when, as a Captain in the New Jersey National Guard, he was called up in the fall of 1940. From the first landings at Casablanca, Colonel Toffey was in the thick of American offensive action. He received the Purple Heart when he was severely wounded in action at Maknassy during the Tunisian campaign, but recovered in time to participate in the landings on Sicily, and to fight through that campaign. He led his battalion in the Salerno landing; and later as executive officer of the 7th (Regular) Infantry in which his father, the late General John J. Toffey, had served many years, he commanded a battalion in the Anzio attack and throughout the occupation of that beachhead. During this action he was again wounded, for which an Oak Leaf cluster was added to his Purple Heart; and he had received the Silver Star for gallantry in action.

He was a member of the Aridor staff from 1935 until his entrance into the Army and is survived by his mother, his wife, a son and a daughter.

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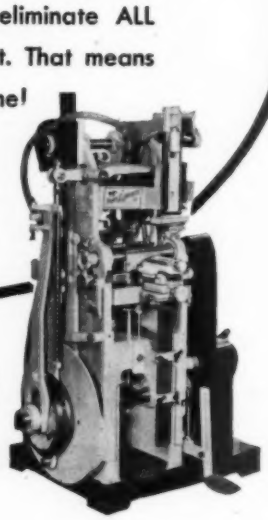

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Production Forum

By Francis Chilson
Industrial Consultant

Intangibles

As we grow older and more widely experienced the conviction is growing upon us that it is not the tangible things that make production records and build morale. We who are engineers and production men have been trained to think only in tangible terms. We are supposed to deal only with material things and to seek material ends. I think we have been kidding ourselves, and, having deluded ourselves, we have taught other people to expect from us only definite and finite and tangible results. If we request ten thousand dollars for new production equipment the management looks to us to justify the investment in terms of dollars saved or in terms of increased production. Overemphasis on the tangible results of a particular investment leads us to buy on price and to trim equipment to the bone in order to keep the investment down.

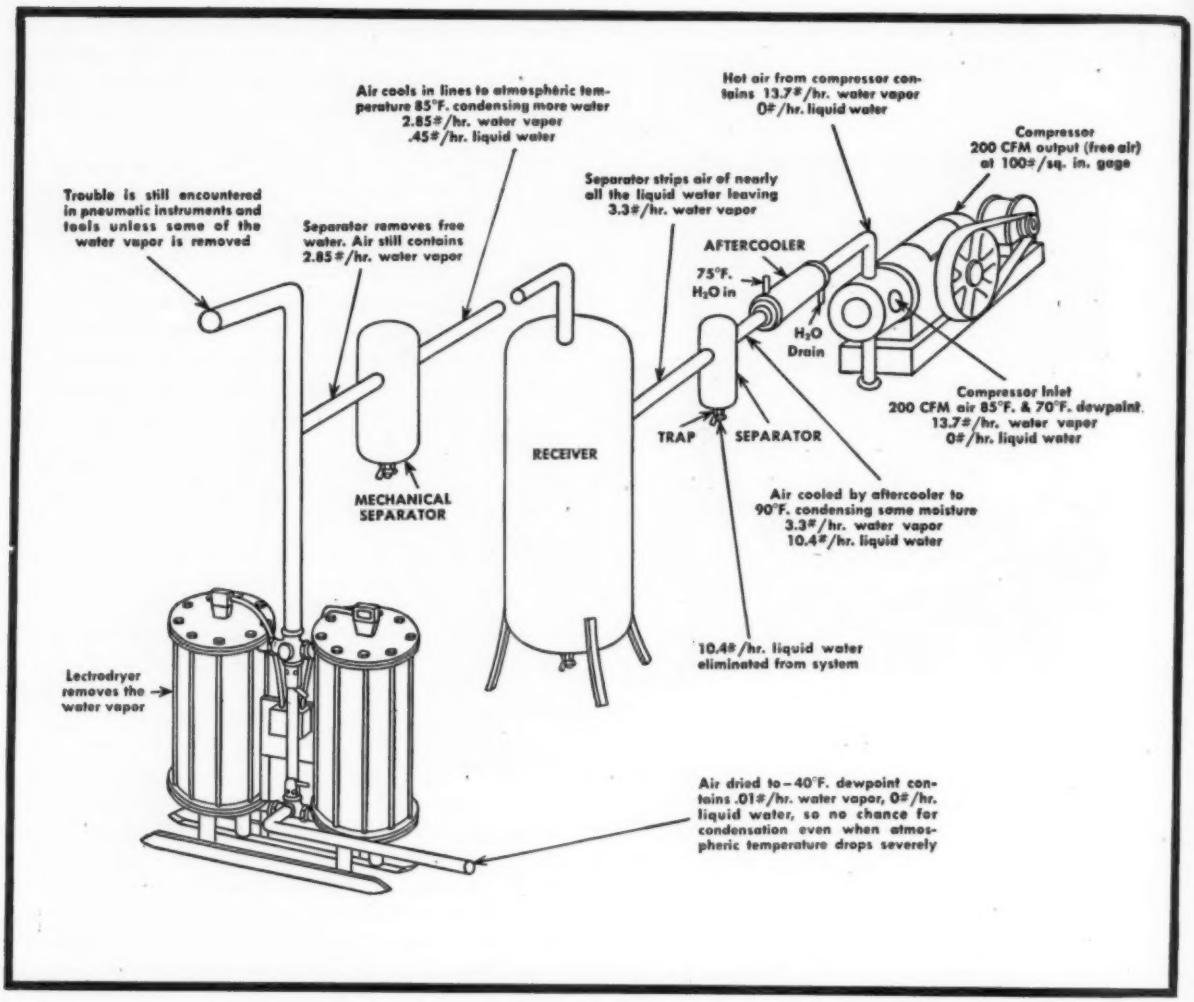
But when we take time off to go fishing or to paint the barn it becomes clear to us on reflection that we've been betting on the wrong horse. When you analyze the results of past performance the force of intangibles weighs heavily in the balance against the tangibles. Let's mention a few intangibles which save money and increase production but only in an indirect and often inexplicable way:—

On a dollars and cents basis you cannot justify sound proofing, air conditioning, tile walls, beautiful paint jobs, attractive rest rooms, mid-day feeding, rest periods, streamlining, attractive uniforms, landscaped factory grounds, baseball games, dances, et cetera, but somehow all these things pay. Somehow all these things actually make the machines run better. How? I'll be damned if I know but I can cite a lot of cases from my own experience to establish the point.

In one operation we decided that the packaging department of a large plant could not be operated even with new equipment with less than eighty-four operators. This total was arrived at by going over the plant, machine by machine, and we all accepted this total as the irreducible minimum. On this basis we made the request for the funds necessary to modernize the department. Yet within sixty days after the program had been completed we were operating with only seventy-two people. We simply rearranged the existing equipment, added some new and provided clean, colorful surroundings. Then somehow the performance of the department exceeded our most sanguine expectations.

In another plant production was more than doubled with less equipment than we had at the start. This job could not justify priorities of any kind so we had to make the best of what equipment we had. At the beginning the plant was far from my standards and it had not been painted in years. The old management didn't believe in spending a nickel unless it could see two nickels in sight beforehand. Since the plant superintendent couldn't show how paint would increase production or decrease costs no painting was done except on the exterior of the building. One of the first observations was that the workers disliked the superintendent. So we played a hunch and had the chief chemist appointed plant manager, because we noticed in going through the plant that all the workers seemed to like him. Moreover, he struck us as being a natural production man misplaced in a laboratory. That was one of the smartest moves we ever made. Things began to happen at once. We cleaned the place up, painted every department a different color combination, installed colorful rest rooms, began providing a mid-morning snack (at company expense), made a few minor changes in equipment. And production increased from a previous daily maximum of 4500 cases to a sustained daily average of 9600 cases. The name of this company is P. Duff & Sons, Inc. of Pittsburgh, manufacturers of baking mixes, and recently acquired by American Home Products Corporation. This is one of the best instances of the value of intangibles in our experience. We spent money of course, a substantial amount of it, but not a dollar for production or packaging equipment. It all went for purposes that could not have been economically justified beforehand.

The Chattanooga Medicine Company affords an interesting example of the value of intangibles. When the plant was modernized we weren't allowed to sound proof the packaging department; we weren't allowed to apply Marlite panels with chromium trim to the side walls and columns—the cost was too great and we couldn't justify such an investment "just for show." So we simply installed the new equipment and adopted a


Air cools in lines to atmospheric temperature 85°F. condensing more water
2.85#/hr. water vapor
.45#/hr. liquid water
Hot air from compressor contains 13.7#/hr. water vapor
0#/hr. liquid water
Compressor
200 CFM output (free air)
at 100#/sq. in. gage
Trouble is still encountered in pneumatic instruments and tools unless some of the water vapor is removed
Separator removes free water. Air still contains 2.85#/hr. water vapor
Separator strips air of nearly all the liquid water leaving 3.3#/hr. water vapor
AFTERCOOLER
75°F.
H_2O in
H_2O
Drain
Compressor Inlet
200 CFM air 85°F. & 70°F. dewpoint.
13.7#/hr. water vapor
0#/hr. liquid water
TRAP
SEPARATOR
RECEIVER
MECHANICAL SEPARATOR
Air cooled by aftercooler to 90°F. condensing some moisture
3.3#/hr. water vapor
10.4#/hr. liquid water
10.4#/hr. liquid water eliminated from system
Lectrodryer removes the water vapor
Air dried to −40°F. dewpoint contains .01#/hr. water vapor, 0#/hr. liquid water, so no chance for condensation even when atmospheric temperature drops severely

HOW DRY IS *Dry* COMPRESSED AIR?

Compression merely crowds the water into a smaller space . . . *Aftercoolers* condense water only to dewpoints determined by temperatures of their cooling water . . . *Separators* remove only the droplets of water too large to be carried over by the air stream . . . *Filters* merely do a somewhat better job than separators, catching more of the water in the liquid phase.

None of these catch the vaporous water in the air. That's where LECTRODRYERS step in to do real DRYing. If you need DRY air, gases or organic liquids, consult PITTSBURGH LECTRODRYER CORPORATION, 309 32nd Street, Pittsburgh 30, Pennsylvania.

LECTRODRYERS DRY WITH ACTIVATED ALUMINAS

PITTSBURGH
LECTRODRYER
CORPORATION

Reg. U.S. Pat. Off.

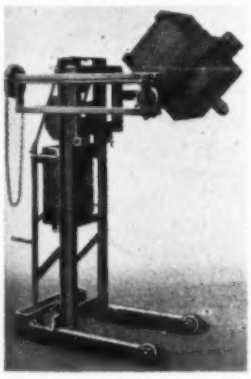
colorful paint scheme throughout. The results during the succeeding two years so impressed the management, that a recently requested appropriation for sound proofing and wall treatment was authorized without question. These installations are being made now. There's no doubt in my mind that we will show an increase in production and a decrease in costs in the immediate future.

When Bill Bristol called in an industrial artist and had him design colorful streamlined shrouds for all packaging equipment, Bill couldn't have justified that considerable investment beforehand on a potential savings basis to save his life. But the investment justified itself nevertheless in increased production and reduced costs. Maintenance expenses went down, breakdowns were fewer.

All this is an appeal to management to stop being niggardly with production expenses. It is right and proper to make certain that the purchase of a specific machine is necessary but it is not right to insist that all trimming be eliminated to cut the investment to the bone. And when expenditures for tangibles are being considered you cannot do wrong by being generous. Investment in intangibles *always* pays dividends.

Management very often is not consistent in its attitude toward intangibles. I've heard company presidents say they wouldn't invest a nickel in intangibles. Yet the same men will employ research chemists; they will invest substantial sums in advertising. If these aren't intangible investments then I don't know the meaning of the term. Management should be consistent; its attitude toward production expenditures should be the same as it is toward all other expenditures. Because we haven't seen the value of "spit and polish" our plants are nothing to be proud of. Let's hope the post-war era will enable management to see the light.

Safe and Convenient Carboy Dispenser



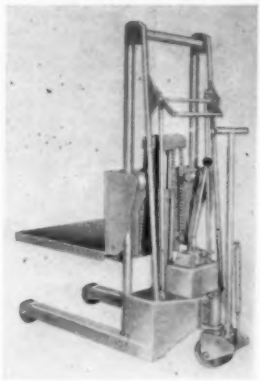
Pouring acids from a carboy by hand is an arduous and hazardous procedure. Futhermore, it is often impossible to raise the container high enough to empty into a vat or tank.

The "Revolvator" special carboy dispenser changes all this and makes the job easy and entirely safe.

The "Revolvator" is wheeled into position straddling the carboy on the ground. Turning the roller in front of carboy tightens the clamps through heavy screws until the carboy is securely held. Turning the crank quickly elevates the carboy to the desired height. It is then tilted slowly by rotating the chain at left driving through worm mechanism. The carboy is held in any desired position until moved again by the chain. After emptying, the carboy is returned to an upright position and gently lowered by the standard "Revolvator" dead man brake lever which is the same handle as is used for elevating.

The "Revolvator" carboy dispenser is a single example of special adaptations of "Revolvator" portable elevators made by the Revolvator Co., North Bergen, N. J., the pioneer in portable elevator development. A similar machine is used for barrel or drum dumping.

Combined Lift and Tiering Truck



What is said to be a definite departure in material handling equipment has just been developed and introduced by Lyon-Raymond Corp., 1587 Madison St., Greene, N. Y.

It is a unique combination of a lift truck and a tiering machine,—a perfect unification of the two basic principles,—that of a rapid, easily manipulated lift truck, and that of a safe, speedy lifting or tiering equipment.

The Lyon-Raymond hydraulic high-lift truck is exceedingly light in weight (495 lbs.) compared to equipment designed to do this one phase of material handling which accounts in a degree for its movability. It also turns readily within its own length.

It is made of special tubular and formed steel construction. Is Timken equipped. Is equipped with powerful floor lock—has controlled fingertip lowering device. The standard stock model has a capacity of 1000 lbs. with platform 24″ wide x 30″ long—has a raising range of 42″—6″ lowered to 48″ elevated. Can also be supplied to meet any other given specifications.

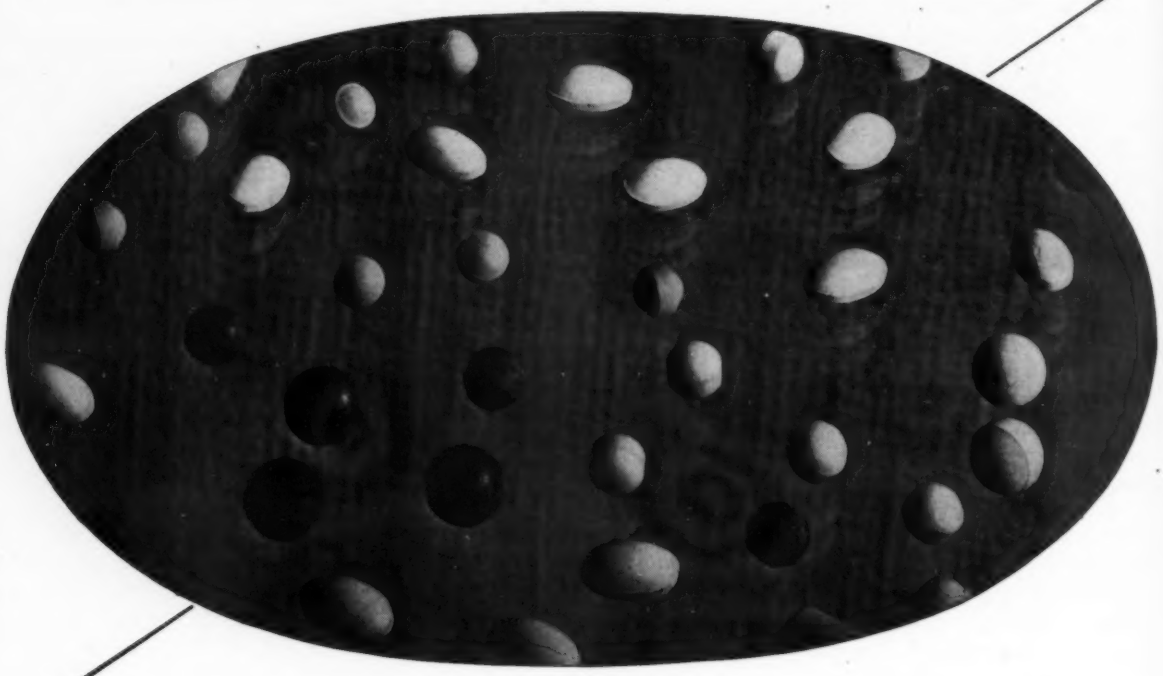
Drum Carrier

Silver Creek Precision Corp., Silver Creek, N. Y. manufactures a 3-wheel, hand-drawn carrier for carrying drums and barrels in an upright position. The carrier is wheeled around the barrel or drum and a clamp is dropped over the inside edge of the charge. Elevating is done by means of a small, lever-operated, hydraulic pump. The model H-1500 will lift a drum weighing up to 1500 pounds. This model will handle drums as small as 26 inches high and as tall as 54 inches. The extreme lift from the floor to the bottom of the drum is 16 inches.

Portable Dehumidifier

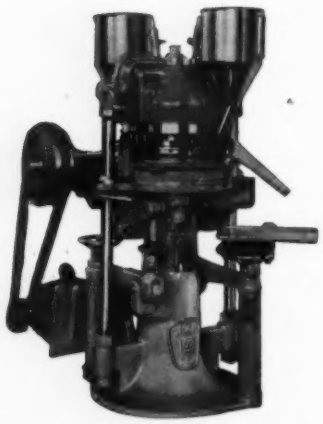
The Hartmann Dehydrator has been mentioned previously in this column. This little job is mounted on casters and may be used wherever it is necessary to set up temporary dehumidified conditions. The unit uses calcium chloride and it is claimed that several of the pharmaceutical companies use them for sterilizing air for ampule sealing rooms.

Compress Your VITAMINS



IN YOUR OWN PLANT

on High Speed Stokes Rotary Presses



Model BB-2 Machines are turning out vast quantities of atabrine, sulfa tablets and other war products for the Allied Forces.

Vitamins may be compressed in pearl, oval, capsule or conventional tablet shape on Stokes Rotaries furnished for this purpose. Special models are available, or certain present machines may be converted.

All the healthful properties of the vitamins are retained when properly compressed, and are readily assimilated. Vitamin tablets are less susceptible to humidity and may be safely shipped to any part of the globe.

Capsule, as well as other shaped tablets, can be made at small expense on Stokes Model BB-2 High Speed Rotary Tablet Machines. This equipment makes possible production when you want it . . . as much as you need . . . and at nominal cost.

Our laboratory facilities are available to assist in the preparation of materials and any necessary balancing of formulas for compressing.

F. J. STOKES MACHINE COMPANY
5932 Tabor Road Olney P. O. Philadelphia 20, Pa.

F.J.Stokes TABLET MACHINES PHARMACEUTICAL EQUIPMENT FJS Est. 1895

U.S.A. Corp.

This is not another name for the United States. It is simply the name of the export corporation headed by my octogenarian friend John Newkirk. John won't admit his age. He tries to keep up with young folks like me. But one thing I'll concede the old buccaneer:—he knows about everything south of the border, except the senoritas. At his age you could hardly expect him to be par on that subject. But John knows everything about our southern friends from the bare-footed peons of the Rio Grande to the bare breasted matrons of Terre Del Fuego. (Hope I spelled it right and that my geography is not amiss.) He is said to prefer Terre Del Fuego. However, all kidding aside. Some of you have been floundering around in the south and central American markets. Some of you want to get started. Quit floundering. Go to Newkirk. He knows, I assure you, everything about everything south of the Rio Grande, with the exception mentioned above. After all he ought to, he's been traveling the Latin American countries since they were discovered. Address U.S.A. Corp. Rockefeller Center, New York.

Handling Drums

Certain types of industries, particularly those involving the handling of chemicals, gas and oil, paint and similar materials in metal drums or barrels, report unusual economy, speed and efficiency through the use of the Yale telescopic tilting fork truck equipped with a removable barrel handling device.

This ingenius addition has special short forks and a metal loop which is dropped over the barrel or drum by lever action after the forks have been slid underneath. This practical device enables the operator to pick up barrels and drums and transport them in and out of cars and storage without stepping off the truck. In effect, one man does the work of several, moving many containers in an hour's time with speed and safety. When job is completed, the barrel handler is removed, the regular forks are replaced and the truck resumes its routine materials handling functions—lifting and moving and high-stacking skid and pallet loads in and out of storage.

Lumarith Lab Ware

These sturdy funnels and graduates are light in weight, transparent, non-shatterable, and resistant to body and food acids because they are made of versatile, easy to clean Lumarith plastic. And since they are economically produced by the injection molding process names and quantity markings on them are part of the the mold and will not rub or chip off at any time.

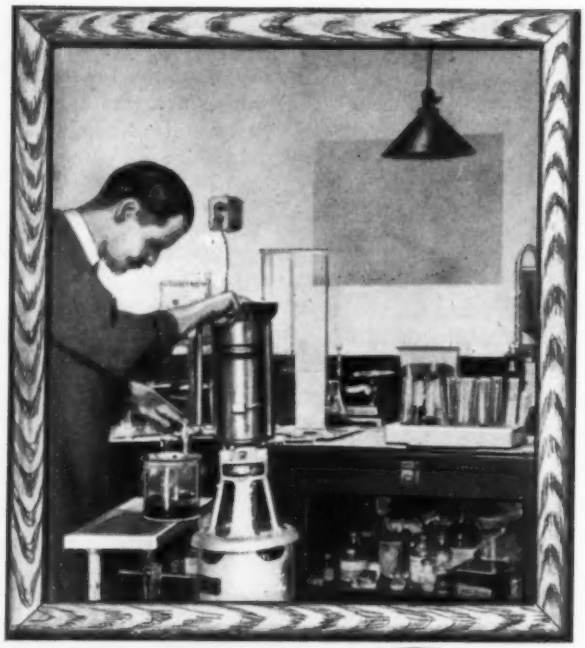
Some idea of the kinds of materials that flow through these articles may be obtained from the list of users which includes hospital supply houses, infant departments, photographic divisions, home economic schools, laboratories, and automotive supply stores. The funnels retail from 10c to 69c depending on the size, and the graduates range from 25c to 75c.

The funnels and graduates shown here are molded by B & W Molded Plastics, Division of B & W Photo Utilities, 1346 East Walnut St., Pasadena, Calif.

Lumarith is a product of the Celanese Celluloid Corp., 180 Madison Ave., New York.

Penicillin

Penicillin for the public has become a reality. More and more big new plants have lifted production of the wonder drug from bottles in the laboratory to three-story-tall tanks. In gleaming clean factories the mold is grown and processed in batches thought impossibly huge short months ago. This expansion of penicillin production from the bottle to the vat was itself a triumph of technology. But the medicinal mold is delicate and unstable stuff. The other half of the penicillin

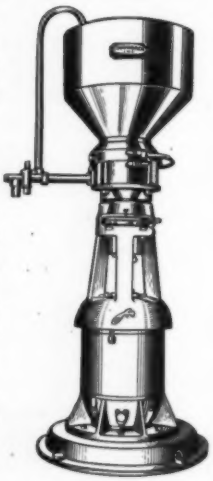


PICTURE OF A
grinding homogenizing and/or emulsifying
PROBLEM BEING SOLVED

ARE you having difficulty in comminuting solid particles to microscopic dimensions or dispersing them into fluid or plastic materials? If so, we can probably help you.

Send a sample of your raw materials to our laboratory together with your processing instructions. We will make a trial run of your sample in an EPPENBACH WET GRINDING AND COLLOID MILL, WITHOUT CHARGE, then return it for your analysis and criticism.

Eppenbach Mills and Homo-Mixers are unlike any other equipment; they may hold the answer to your problem.



EPPENBACH, INC.
44-12 11th Street, Long Island City 1, N. Y.

Eppenbach INC.
PROCESSING EQUIPMENT FOR OVER 30 YEARS

problem was to concentrate great quantities of the drug so it would keep indefinitely in the little vials which carry its lifesaving power all over the world. Freezing the drug, then drying off the ice was the technical answer. But the quantities planned demanded development of a whole process to handle such volume.

The story of how the much needed process was found begins last September. E. B. Badger & Sons Co. had just been charged with construction of one of the world's largest penicillin plants for Commercial Solvents Corporation at Terre Haute, Indiana. Needing help in solving the complicated vacuum engineering problems involved in mass-drying the drug, they investigated a process which National Research Corporation of Boston had worked out for dehydrating heat-sensitive materials under high vacuum.

The process had been tested on a small scale, in the laboratory, on food. Would it work on a mass production basis, in a factory, on penicillin? At that time the drug was so scarce that not even a small amount of it was available for tests to make sure. In spite of that, Commercial Solvents staked the cash, and Badger and National Research their reputations, that it would work.

Time was as short as penicillin. Skipping the pilot plant stage, research, engineering and construction were carried out simultaneously. Commercial Solvents gambled on its faith in a scientific deduction, and its faith in those with whom the work was done. Faith won.

When a request for priorities for equipment for the plant reached the War Production Board, William J. McManus, then head of the Board's penicillin Unit, also investigated the process. To Boston with him went the Chief of the Army Medical School's blood research division, Lt. Col. Douglas B. Kendrick, and Capt. L. R. Newhouser of the Navy Medical Corps. Over the week-end they watched tests run on blood plasma in a pilot plant called a "meat machine" because it had been built to study the dehydration of metal and other foods. A cabinet to hold the bottles of plasma was hooked up, the process began to function.

It worked. The plasma was dried many times faster than by other methods, and the WPB estimated that it would cut drying time and cost considerably on penicillin.

Almost immediately the National Research process went into other plants being blue-printed for big production, and it was made royalty-free for this vital work with penicillin. Soon much of the world production will come from the plants of Commercial Solvents Corp., Charles Pfizer Co., Inc., Cutter Laboratories, Heyden Chemical, Cheplin Laboratories, and Schenley Laboratories—plants using the high vacuum diffusion process developed and engineered by National Research Corporation.

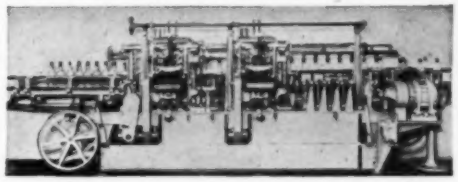
In this process, the carefully cultured and concentrated solution of the drug is dried, while frozen, under high vacuum. Heart of the process is that moisture and air are pumped independently of each other, while the

whole system of cabinets, manifolds and ice chambers is kept under vacuum 30,000 times less than normal air pressure. Even so simple a thing as a valve must be specially engineered and manufactured to avoid leakage at such pressures.

Developed to move high vacuum from the laboratory to the factory, proved in plasma and penicillin installations, the high vacuum diffusion process has many applications in the food and drug fields. Vaccines and bacteriologicals are typical heat-sensitive materials which can be dried successfully at low temperature and high vacuum. Fruit juices and fats are notoriously difficult to dehydrate. One food product possible with modern vacuum engineering is a powdered orange juice which, reconstituted with plain water, has all the color, flavor and vitamin content of the fresh-squeezed fruit.

Miscellaneous

G. E. has produced a fractional horsepower motor capable of a speed of 120,000 rpm . . . The human skin weighs six pounds on the average and is approximately sixteen to twenty square feet in area. . . . Seems like the post-war era will bring many more rouge manufacturing plants into being; a lot of cosmetic houses which used to buy are now planning to make. . . . Cream and paste rouge are coming back and a type of stick with easy spreading qualities which can be used either for cheeks or lips is en route. . . . Quick drying emollient face powder suspensions seem likely to come back in greater variety. . . . The future of cake make-up seems bright. Funny how this old timer came back to new and greater life. Made 'em twenty years ago at Marinello. Used to call them Phantom Powder Cakes. Were intended for evening use only and were packaged in a flat opal jar with a domed cap to hold the sponge. . . Spray nozzles of all types are made by Spray Engineering Co., Somerville, Mass. . . . Lalance & Grosjean Mfg. Co., Woodhaven, N. Y. make all sorts of stainless steel pans and pots in large sizes for industrial use. . . . Parts for conveyor work tables are made by Unistrut Corp., Wayne, Mich. With these standard parts you can make your own conveyors in jig time. . . . A machine for dumping bottles is made by Louis L. Keeler, West Landsdowne, Pa. Machine opens the flaps and dumps the bottles right side up on conveyor belt. . . . St. Regis Paper Co., 230 Park Ave., N.Y.C. has a laminated sheet, Panelyte 906, available in thicknesses up to one quarter inch, which can be stamped and formed like metal. In case you get stuck for metal for caps have a look at this. . . . American Abrasive Metals Co., Irvington, N. J. makes Martex, the non-skid stair and floor material. . . . Dupont has published a free booklet, Dupont Safety Color Code. . . . Albert Pick Co., 2157 Pershing Rd., Chicago makes food dispensing trucks to enable you to feed your workers on the job especially between meals. Carries hot and cold food. . . . Bradley Washfountain Co., Milwaukee produces shower stalls also. . . . Industrial Equipment Co., 1735 W. Howard, Chicago produces a handy pillar type jib crane designed to rotate 360°. Handy for dumping barrels into



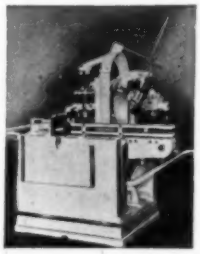
WORLD Automatic BEE-LINE Straightaway Labelers apply front or front-and-back body labels, and neck labels if desired, to round, square, flat, oval or panel containers.

DRUG AND
COSMETIC INDUSTRY
and the POST-WAR **WORLD**

The one best labeling set-up for *your* glass containers, *your* labels, *your* volume and *your* variety of sizes, is not something to leave until the last minute. It's a key link in the production chain that calls for careful planning and clear understanding of all the possibilities.

The makers of WORLD Labelers are in a unique position to help you line up your labeling and be sure it's *right* from every standpoint—quality, production, economy. Their recommendations are made without prejudice because only WORLD builds *all* types of Labelers—full automatic and semi-automatic—for *all* shapes, sizes and types of glass containers.

Isn't it a good idea to get the facts right from WORLD Headquarters? And isn't *now* the time to do it?

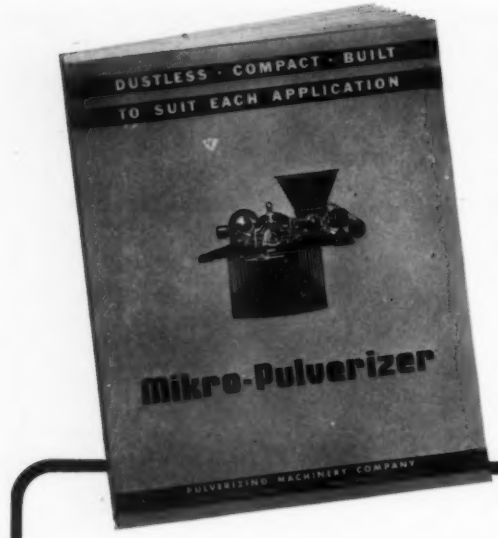


WORLD Automatic TURRET Labelers provide high quality, low cost body and neck labeling on smooth, fluted, or fancy containers.

WORLD LABELERS

WORLD Semi-Automatic MODEL "S" Labelers apply body labels, all around labels, neck labels, to any size container from tiny samples to gallon jugs.

ECONOMIC
MACHINERY CO.
WORCESTER, MASSACHUSETTS



If the manufacture of your product calls for pulverizing, granulating, wet milling, blending or dispersing. . . . THIS NEW CATALOG CAN BE AN IMPORTANT AID TO YOU.

Three sections of this 40 page book deal with the production problems of cosmetic manufacturers and manufacturers of drugs and pharmaceuticals. These pages explain fully the "single process" *dustless* treatment of the products you make.

Send for your copy today

PULVERIZING MACHINERY COMPANY
22 Chatham Road, Summit, N. J.

Mikro-Pulverizer

mixers. . . . Groen Mfg. Co., 4537 W. Armitage, Chicago makes slick mixing kettles for creams, etc. . . . A handy, portable booster for loading and unloading box cars, trucks, etc. is made by Rapids Standard Co., Grand Rapids, Mich. . . . Jack lifts for wheel skids made by Thomas Caster & Truck Co., Keokuk, Iowa. Useful around shipping rooms; much easier to handle than conventional lift trucks, especially for women. . . . A new concrete floor overnight can be made from a special quick setting cement made by Lone Star Cement Co. It's called Incor. Offices are located in every big city. See your local Red Book. . . . So long until next month. . . .

Spray Dryer

Western Precipitation Corp., 1014 W. 9th, St., Los Angeles 15, recently introduced a laboratory size stainless steel spray tower. The apparatus is about nine feet high over-all and occupies a space about five by five feet. The contraption comes to you complete with gas or electric heaters, discharge fan and turboclones for the removal of the dried product. This is a fine job. When I was in Los Angeles recently I looked it over. It costs somewhere between five and six thousand dollars which seems very reasonable for such a large stainless steel apparatus. I was much impressed with the live wire bunch of young engineers and physicists I met there. It strikes me that this outfit knows its business.

Dry Sterilization

Sterilization with water or steam is a messy operation. It is done because no one has yet worked out a method of dry sterilization so efficient in its distribution of heat that uniform results can be assured. Electronic heating offers a possibility of creating a dry sterilization method which will be uniform and fool proof. Heat is generated within the material itself. Problems of control are involved of course and I have this subject under discussion now with the largest manufacturer of electronic tubes in the world. I'll report later. Hot water and steam are simply means of conveying heat and not particularly efficient means at that.

In the average cabinet sterilizer ampoules and containers of one sort or other are jam-packed against each other so tightly that unrestricted flow of water or steam around individual containers is impossible. A good many of the containers are heated by conduction only. Electronic sterilization should improve that if it is not too costly for general application.

Send for a Copy

Stokes and Smith have issued a new bulletin on the Universal Filler. This handy semi-automatic machine has been used for filling all manner of powders into all manner of containers. Also issued by the company is a new bulletin describing a variety of applications of the transwrap machine.

Inland Equipment Corp. have issued a bulletin on the Styl-O-Matic Unscrambling Table. These are very handy units.

Heat Reflectance

"New Approaches to Surface Protection" is the title of a new pamphlet received from Preferred Utilities Manufacturing Corp. It is primarily a technical discussion of highly desirable advantages ascribed to the Preferred preparations, White Hot and Pyro-Chrome.

These protective coatings take advantage of properties of heat reflectance, a hitherto overlooked principle by which a substantial amount of radiant heat energy is put back to work, instead of being absorbed by heat chamber linings.

A series of interesting new graphs show the relative reflectance values of different colors found in refractories and other heat-resisting surfaces. White and green and shown to have the highest heat reflectance properties.

Preferred White Hot, white in color and practical for temperatures up to 2840 F., and Preferred Pyro-Chrome, green in color and capable of withstanding heat up to 4000 F., are both applied like paint. A relatively thin coat, penetrating into the material to which applied, is intended to form a pore-deep bond, stabilizing the surface, proving highly resistant to heat, corrosion and oxidation and more enduring than thicker coatings of other heat-resisting materials.

This new treatise should prove interesting to engineers and executives, especially those faced with new and unfamiliar problems in heat resistance. Refractories, metals, ceramics and glass are substances on which these coatings have already been found effective, and it is believed that many as yet undiscovered uses will disclose themselves. Full cooperation is offered in testing problematical applications.

This new pamphlet may be obtained by writing Preferred Utilities Mfg. Corp., 1860 Broadway, New York, 23, N. Y.

Dry Fire Extinguisher

National Powder Extinguisher Corp., 50 Rockefeller Plaza, New York City offers a fire extinguisher especially useful for smothering fires from highly inflammable solvents. The apparatus resembles an ordinary fire extinguisher somewhat and in use sprays a cloud of very fine alcolin powder over the fire. The chemical is activated by the heat and creates a dense smothering blanket which extinguishes the fire.

Penicillin Drying

R. C. A. Laboratories, Princeton, New Jersey, have applied the principle of electronic drying to penicillin. The development work was done by Dr. George H. Brown in collaboration with E. R. Squibb & Sons. It is claimed that this method of drying reduces the time required from 24 hours to ½ hour.

Indicating Cocks

You can purchase from Techtman Industries, 828 North Broadway, Milwaukee, 2, Wisconsin, an indicating cock for 30 and 55 gallon drums. These cocks are equipped with gauges which enable you to tell at a glance exactly how much liquid is left in the drum.

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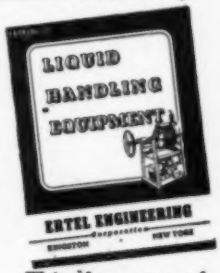
in 10 porosities from coarse pre-filtration to ultra-fine germproof filtration. Available in sizes to fit any type filter. No matter what your liquid handling problem, Ertel engineers can solve it quickly and economically. Ertel sheets are manufactured from the finest available materials under the most rigid specifications. The Ertel free testing laboratory will test and filter any liquid and return it with recommendations regarding the correct porosity filter sheet for superior filtering. And a sufficient number of sheets, recommended after test, will be sent for a single set-up in your filter so you, too, can prove the results. Ertel Neutral Asbestos Filter Sheets will filter your product better. Send a sample of your liquid today and see for yourself — no obligation of course.



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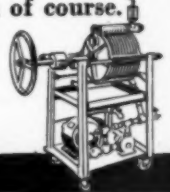

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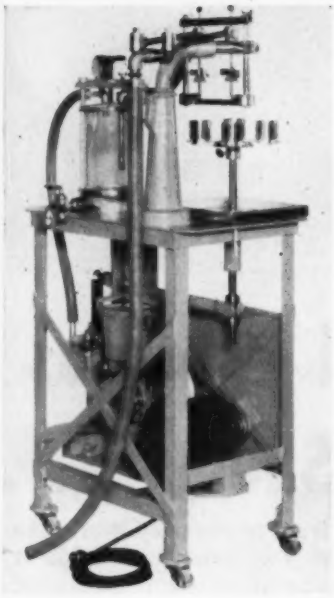

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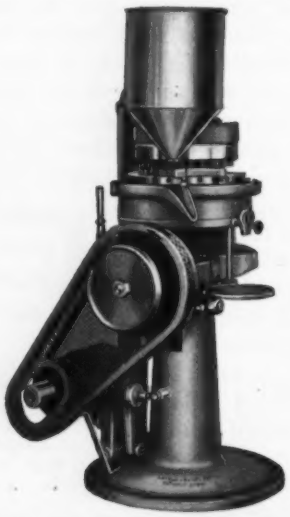

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Industry's Books

Miracles Ahead! Better Living In The Post-war World, by Norman V. Carlisle, Executive Editor and Director Of Aviation Research Associates, and Frank B. Latham, Associate Editor of Scholastic Magazine, 288 pp., The Macmillan Co., New York, $2.75.

Since we have just reached the doorstep of the great new world of tomorrow, we all look forward with interest to what that world has to offer in the form of a better way of life. Technologically the prospects are brilliant. This book points them out in detail. New type homes to live in, new appliances, cars, planes, ships. New television and radio services, chemical magic, metals, wood, food, medicine. Enough miracles are described here to make everyone wish to live long enough to benefit and to enjoy them. Some of these miracles have already been realized. Others lie some time in the near or in the distant future. But the promise is made and the authors point out these wonders in a way that makes interesting reading. The chapters on Chemistry Magic, and Medicine Looks Ahead, will prove particularly interesting to readers connected with the industry served by this magazine.

Health And Hygiene, by Lloyd Ackerman, Western Reserve University, 895 pp., The Jaques Cattell Press, Lancaster, $5.

Since the purpose of this work is to present the subject matter in an academic way, all available material on hygiene—physical, mental, social, and spiritual—has been correlated and fully indexed. Very complete references follow each chapter. The book is divided into the following main parts: Part One—Introductory; Part Two—The Evolution of Health Concepts and Health Practices; Part Three—The Evaluation and Importance of Health Concepts and Health Practices; Part Four—Parasitism and Hypersensitiveness; Part Five—Hygiene of the Mouth; Part Six—The Hygiene of Nutrition; Part Seven—Hygiene of the Emotions and the Intellect; Part Eight—The Hygiene of Mating; Part Nine—Exogenous Poisons; Part Ten—Physical Agent and Their Relations to Health.

Notes On Nursing By A Nurse, by Sarah Corry, R.N., 144 pp., D. Appleton-Century Co., New York, $1.50.

This valuable little book, based on training given at the Evanston Hospital School of Nursing, furnishes concrete help and many valuable hints which will enable nurses to take better care of the sick and injured. It is intended to be a digest of current and practical detail a nurse wants to know when she needs to know it.

Clinical Diagnosis by Laboratory Examinations, by John A. Kolmer, M.D., Professor of Medicine in the School of Medicine and the School of Dentistry of Temple University, First Ed., Revised, 1239 pp., Illus., D. Appleton-Century Co., New York, $10.

The purpose of this work is to present fully the clinical interpretations of laboratory examinations and their practical applications in the diagnosis of disease, along with a brief section of laboratory technical methods sufficient for meeting the needs of teaching clinical pathology to medical and dental students. Clinical interpretation of laboratory examinations is therefore covered in Part One of this work. Part Two summarizes the important laboratory findings of specific or helpful value in the diagnosis and treatment of diseases of the blood and hemopoietic system, the kidneys and urinary tract, the venereal diseases and those of the stomach, intestines, pancreas, liver and billiary tract, cardiovascular and respiratory systems; also the diseases of metabolism, those due to the vitamin deficiencies, the diseases of the endocrine glands, and miscellaneous infectious diseases. Since the book is largely devoted to the practical aspects of laboratory examinations in relation to clinical diagnosis, Part Three has been devoted to the technic of such methods instead of scattering them about in the text. Many illustrations have been included where they best serve to elucidate the text.

Wood Chemistry, Edited by Louis E. Wise, The Institute of Paper Chemistry, Appleton, Wisconsin, American Chemical Society Monograph Series No. 97, 900 pp., Reinhold Publishing Corp., New York, $11.50.

Since the publication of Monograph 28, "The Chemistry of Wood" in 1926, the field has expanded with ever-increasing rapidity. What is important to the reader is the course which fundamental investigations have taken during recent years. The chemistry and fine structure of cellulose, the most important cell-wall component, has been clarified and elucidated. The important field dealing with surface properties of cellulosic materials is a development largely of the past 15 years, with every assurance that it will remain one of the most vital and significant phases of wood chemistry. Progress has been made in studies of extraneous components of wood, of the chemistry of lignin, and in wood analysis. Recognition of the fact that lignin and its derivatives are among the world's greatest industrial wastes serves as a constant challenge to chemists, technologists and inventors. Advances have been made in the studies of the hemicelluloses. Very interesting progress, too, can be reported on the chemistry of the cell wall to which the chemical microscopists have contributed signally. All these phases are discussed in this book. Here, too, the reader will find some extensive discussions of the physical and chemical properties of cotton cellulose and some of its degradation products and derivatives. This work is more than an expansion of the original monograph by Dr. Hawley and the present editor. It is a new cooperative enterprise to which thirteen others have contributed.

The Standardization of Volumetric Solutions, by R. B. Bradstreet, M.S., Second Ed., 151 pp., Chemical Publishing Co., Inc., Brooklyn, $3.75.

Included in this second edition are the most modern methods of standardization. Its purpose is to enable laboratory technicians to prepare their standard solutions not only in the most efficient

manner, but in the shortest possible time. Also included are equations, tables of pertinent data, etc.

Fundamentals of Anesthesia, by Subcommittee on Anesthesia of Division of Medical Sciences, National Research Council, Second Ed., 231 pp., Illus., American Medical Association Press, Chicago, $2.50.

This is primarily intended to serve as a basis for the instruction of medical officers as anesthetists. Its emphasis is on the principles governing safety in the administration of depressant drugs and the care of patients in a state of respiratory or circulatory depression. The material has been drawn from a wide range of sources. Much of it was issued in pamphlet form by the American Medical Association. It sets forth primarily: (1) the simple principles of physiology, pharmacology, chemistry and physics on which the sound practices of anesthesiology are based, (2) the technical procedures necessary to apply these principles effectively in relieving surgical pain and (3) the application of these principles to the management of patients suffering from injury, illness, operation or the effects of depressant drugs in the hospital or in the field.

Chemical Machinery, An Elementary Treatise On Equipment For The Process Industries, by Emil Raymond Riegel, Ph.D., Professor of Industrial Chemistry, University of Buffalo, 583 pp., Illus., Reinhold Publishing Corp., New York, $5.

This is a collection of exact and useful information relating to apparatus and devices used in the chemical industries. The treatment is primarily descriptive, and the text material is liberally supplemented with drawings and photographs. Whenever possible, the reasoning governing the conception of the device, its operation, and the determination of size for an intended service are given. Each group of related devices forms a chapter, and each chapter has in its introduction a classification in tabular form—a feature which should find favor. For each type of device, an example is selected and followed long enough to make its construction and operation clear. For a number of kindred devices serving the same general purpose, a critical appraisal of each, with the special adaptation it offers, is presented. Numerous quotations of the money costs of devices are included.

The Geography Of World Air Transport, by J. Parker Van Zandt, Vol. I of a series under the general title: America Faces The Air Age, 67 pp., Illus., The Brookings Institution, Washington, $1.

In this first of a series of special investigations by an outstanding aviation authority, some of the basic facts which will determine international policies in the aviation field are reviewed. Prevailing misconceptions about trans-polar routes are analyzed. It is predicted that few, if any, major air routes of the future will go as far north as the Arctic Circle. The illusion that air lanes will not vary greatly from the old sea lanes and that over-water routes have the greatest population density are among the factors discussed.

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Essential Oils From Chile

A report to the Department of Commerce, states that Chile is engaged in studying means of enlarging its essential oil production. It is believed by specialists in that country that Chile can grow certain essential oils which can be used in wide variety in the drug, cosmetics, and perfume trade to such an extent that Chile's own demands will not only be supplied, but an exportable surplus will be available as well. The Corporation for the Development of Production has granted loans to those who desire to plant medicinal plants and produce essential oils.

Thus far, though cultivated in Chile, mint and lavender are not being grown in quantities sufficient to meet all the requirements for internal consumption. Pine and eucalyptus oils, however, are being exported in small quantities. Pyrethrum, poppyseed, saffron, rue, sage, and quillai bark have been found adaptable to Chilean climate and soil. According to a foreign journal, about 2,700 tons of quillai bark were exported from Chile before the war; Germany being the largest recipient.

Perfumer's Shelf

Cinnamaldehyde Studies

Cinnamaldehyde, notes G. Dedinszky (through *Chem. Abstr.* 38:2794, 1944) is not a desirable substitute for natural cinnamon oil because of its ease of air oxidation to cinnamic acid, benzaldehyde and benzoic acid. He found that a thin layer of cinnamaldehyde lost 8 to 14 per cent of its weight during a one-year storage period. Cinnamaldehyde stored for one year in 2 per cent concentration with sugar lost only 0.4 per cent weight, but lost most of its characteristic odor and the presence of benzaldehyde could be detected by smell. In contrast, natural cinnamon oil is stable owing to the presence of eugenol as an antioxidant. To differentiate between natural and artificial cinnamon oil preparations, one must therefore determine the cinnamaldehyde and ether-soluble oil content.

Dermatitis from Cold Permanent Wave

J. B. Howell in the *Archives of Dermatology and Syphilology* (49:432, 1944) reports a rare case of contact dermatitis from the new method of "cold permanent waving." As a result of his work, in collaboration with B. Shelmire, he came to the conclusion that this case is an example of an eczematous contact dermatitis following within twenty-four hours a cold permanent wave. A period of incubation of sensitivity was absent. Unquestionably, therefore, this patient was already sensitive to some ingredient in the preliminary lotion, since patch tests elicited positive reactions on two different occasions. Tests on 3 normal control subjects elicited negative reactions. Sensitization due to previous contacts with the allergen present in the preliminary solution or a closely related chemical took place without the patient's knowledge. Reexposure to this substance when she received a cold permanent wave precipitated the allergic response.

Allyl Isocyanate in Mustard Oil

In reviewing the various methods for the determination of allyl isocyanate in mustard oil, O. de Almeida and A. H. de Souza (*Rev. brasil. farm.* 24:442, 1943) find that with partially decomposed materials, the argentimetric procedure of the 1914 "British Pharmacopoeia" is superior to the iodometric determination because allyl alcohol does not interfere with the former. A factor of 0.0049554 is recommended instead of 0.004955 for the calculation of allyl isocyanate from the amount of 0.1N silver nitrate consumed. With dilute ferric chloride various mustard oils show a yellow to red color, the stronger the color the lower the *p*H of the oil and the lower the content of allyl isocyanate. On the basis of these experiments, the workers suggest that the decomposition of mustard oil is initiated by hydrolytic cleavage of the ester to yield allyl alcohol and thiocyanic acid. The yellow color is ascribed to the same reaction and to traces of iron in the oil.

Cetyl Pomade with Cholesterol

In a discussion of cetyl alcohol pomades containing cholesterol, F. A. J. Thiele (*Pharm. Weekblad.* 79:777, 1942) proposed the following two formulas for such preparations:

	A	B
Cholesterol	1.0	1.0
Cetyl alcohol	3.0	3.0
Anhydrous lanolin	5.0	5.0
Paraffin	20.0	20.0
Liquid petrolatum	30.0	27.0
White petrolatum	50.0	50.0
Water	70.0	106.0

For each 1000 Gm. of pomade, 2.5 Gm. of the following perfume mixture is suggested:

Lavender oil	2.2 cc.
Artificial oil of neroli	2.0 drops
Bergamot oil	10.0 "
Rose oil (Schimmel No. 100)	4.0 "
Jasmine oil	5.0 "
Rosemary oil	10.0 "
Essence of ylang ylang	15.0 "
Coumarin	0.4 "

Vanilla Vines and Cashew Trees

A note in *Agriculture in the Americas* for June 1944 tells that recent experimental work in Puerto Rico has developed a combination, or partnership, of the vanilla vine and the cashew nut tree that bodes well to help solve a vanilla-production problem. The vanilla producing plant is a climbing orchid which needs both support and shade for good growth, and the tree that has been used for this purpose in Puerto Rico often loses its leaves in hot dry weather, just when the vanilla most needs shade and protection. In recent test plantings, the vanilla vines have been grown on cashew trees with excellent results.

Balm Mint and Balm Spirit

According to H. Braun (*Fortschr. Therap.* 18:80 & 83, 1942) balm mint or Melissa (*Melissa officinalis* L.) must be considered one of the oldest medicinal plants. The drug contains about 0.1 per cent of ethereal oil, especially citral and citronellal, besides geraniol and linalool. They have the character of unsaturated aldehydes. The properties of balm oil resemble chamomile and peppermint oils to a marked degree.

The author also reports that the ethereal oil of the balm mint exerts an antispasmodic and sedative action. It has distinct narcotic properties. It slows the respiration and pulse and lowers the blood pressure. Experimental tests on human subjects given caffeine confirmed the sedative action of balm spirit.

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JASMINE PROVENCE No. 2

Lower priced than Provence No. 1, this synthetic produces economical jasmine effects appealing to modern tastes.

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A finished perfume specialty, indispensable as a working base for jasmine perfumes. Complete fidelity of odor.

JASOLEA "N"

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JASOLEA "X"

Reproduces the effect of jasmine absolute of volatile extraction. It blends perfectly with the natural essences.

JASMINE No. 48

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JASMINE No. 49

An inexpensive working base for jasmine perfumes. It is well fixed and requires little manipulation by the compounder.

JASMINE No. 50

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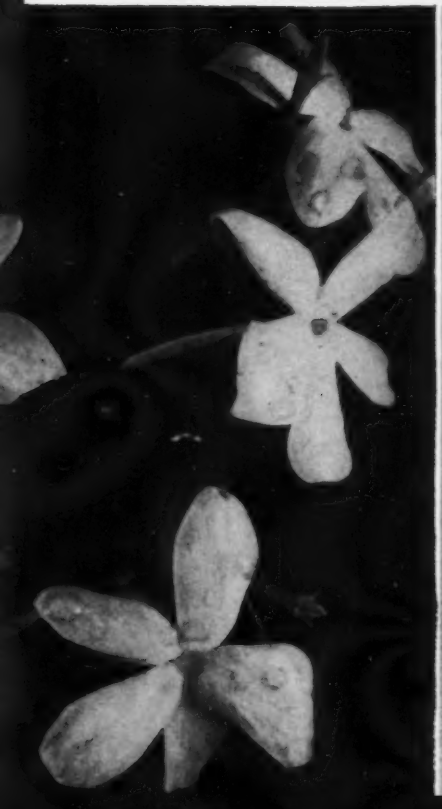
JASMIA "A" JASMIA "B" JASMIA "C"

In these three specialties the perfumer will find inspiration for a number of interesting new odor effects based upon jasmine but modified slightly to give a unique, fruity nuance that is both pleasant and appealing. Jasmia "A" and "B" are intended for extracts, toilet waters, colognes and powders. Jasmia "C" is intended especially for soaps and creams. It is highly stable and non-discoloring.



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PLEASE UNFOLD THE PAGE

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TOP honors for the most widely used oils in technical products would certainly include citronella and sassafras. Top honors for the most widely used substitutes for these oils would probably go to these two time-proven specialties — JAVOLLAL and SAFRELLA. May we tell you more about them?

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AT the time these two aromatic specialties were first offered, there was no shortage of natural oils. They were competing as replacements, solely on their own merits — and in order to sell, *they had to be good!* Today they have behind them the practical indorsement of hundreds of satisfied users.
JAVOLLAL is an excellent substitute for oil citronella. It is more stable, has a finer, cleaner odor, is stronger and more lasting. It is recommended for use in soaps, insecticides, stock and cattle sprays and other technical products.
SAFRELLA is an effective replacement for artificial sassafras which is not now available. Its odor strength is similar but more penetrating. We recommend it for use in laundry soaps, low priced toilet soaps, insecticides, germicides and numerous other technical mixtures.
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Citrus Oils from Palestine

According to a report by J. Davidsohn in *S.P.C.* (17:337, 1944) essential oils from citrus fruits are being produced in useful but not very large quantities in Palestine. However, practically all of this output is exported to the United Kingdom.

In the main, hand-pressing is the process utilized in Palestine for the production of citrus oils. This primitive process still has the advantage over machine-pressing of giving a lighter oil with a better flavor. For hand-pressing a simple device is mostly used, which consists of a kind of funnel with needles in the inside walls, which prick under slight pressure the upper layer of the peel. The pressed oil passes through the funnel and is collected most conveniently in tin-plated or enamelled containers, as iron has a deleterious effect on the oil. The crude oil may be cleared by simple settling and filtering or by centrifuging and filtering.

Machine-pressed oils are also offered. They are usually darker, and more water is pressed out with the oil. If not quickly separated, the water causes a certain degree of spoilage. There are also pressing-methods which produce the oil from the peels after the juice, etc., is removed. These methods usually do not give the same quality oils with the pure citrus flavors.

The following characteristics, as given by Braserman, are the analytic data for Palestinian orange oil:

Specific gravity at 15.5°	C. 0.8488
Optical rotation	+98.85°
Refractive index at 20° C.	1.4710
Residues on evaporation not higher than 100° C.	2.76%
Aldehydes, as decylic	1.4%

These qualities compare favorably with the specifications for orange oil as given in the U.S.P. XI.

Terpeneless citrus oils are also produced. A terpene-free oil derived from Palestinian orange oil had a specific gravity of 0.979, optical rotation of +30°, aldehydes 4.68%, alcohols—as geraniol—16%.

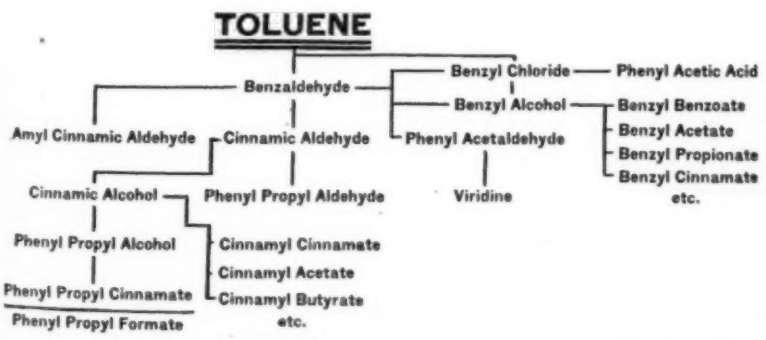
The Palestinian lemon oil corresponds generally in its data to the Oleum Limonis of the British Pharmacopoeia, 1932. The B.P. specification lays down a specific gravity (15.5/15.5° C.) of 0.857 to 0.861; an optical rotation of +57° to 65°; and a refractive index at 20° of 1.474 to 1.476. The oil should contain no less than 4% w/w of aldehydes, calculated as citral.

Concrete Oil of Henna

In a note concerning the concrete oil of henna from Morocco, S. Sabetay and L. Traband (*Ann. Chim., anal. Chim. appl.* 23:286, 1941, through *Chem. Abstr.* 38:3085, 1944) reported that from 12 kg. of henna (*Lawsonia inermis*) was obtained by extraction with benzene, 198 Gm. of a fragrant half-liquid concrete (1.65 per cent) with an acid number of 16.8 and an ester number of 62. By codistillation with ethylene glycol an aromatic compound (3.7 per cent) was obtained which upon vacuum distillation produced sulfur- and nitrogen-free brown-green liquid which gives a brownish solution with ferric chloride solution, a chestnut-brown solution with antimony trichloride solution, and a blue solution with Bezssonoff's reagent in the cold. Its index of refraction is 1.4690, acid number 13.8, ester number 182, methoxyl content 1.48 per cent.

Pennyroyal Oil from Morocco

In presenting analytical data on pennyroyal oil from Morocco, P. Pinel (*Ann. chim., anal. chim. appl.* 23:289, 1941, through *Chem. Abstr.* 38:3086, 1944) report that the oil of *Mentha pulegium* L. is distinguished by its high pulegone content. Its properties are: d_{15} = 0.939–0.982 (occasionally 0.932–0.945), α_D 16.50° (occasionally up to 22.55°), n_D^{20} 1.487–1.494, pulegone content 89-97%, soluble in 1.5-2 volumes of 70% alcohol.



Antioxidant Studies

Because under the stress of present world circumstances it has become desirable to stabilize vegetable fats and oils to keeping times much greater than was ever before felt necessary, K. F. Mattil, L. J. Filer, Jr. and H. E. Longnecker (*Oil & Soap* 21:160, 1944) undertook a study on the antioxidant effects on vegetable oils and fats of a group of compounds, most of which have been studied in the past with reference to animal fats.

They found that the most effective single compound was gallic acid, although NDGA (nordihydroguaiaretic acid), ascorbic acid and ascorbyl palmitate each about doubled the keeping time of any given vegetable fat or oil. NDGA in combination with either citric acid or phosphoric acid showed marked synergism. These combinations were very effective antioxidants. Amino acids were negative with the exception of methionine.

In their report the authors point out that it must be kept in mind that the vegetable oils and fats contained natural inhibitors, and thus the effects observed are the results of combinations of antioxidants.

Raw Materials for Aromatics

An interesting article in the *Givaudanian* for June 1944 helps to give a clearer understanding as to why aromatics are scarce. It is pointed out that the aromatics industry is dependent on half a dozen coal tar and petroleum derivatives which under normal conditions would be readily available but which are now being diverted to the requisites of war. Benzene, for instance, is the starting material in the most important process for the manufacture of phenyl ethyl alcohol, and the latter in turn, in addition to its widespread use for its rose odor, is the starting material for the production of phenyl ethyl acetate, phenyl ethyl propionate and a group of similar esters. It is also used in the manufacture of benzophenone and acetophenone, in the manufacture of nitrobenzene, which in turn is used in producing eugenol vanillin.

The industry's dependence on toluene as an essential raw material is graphically illustrated in the chart published with the article and reproduced here.

Other illustrative examples are cited to show the dependence of the perfumer upon a wide variety of organic chemicals now in great demand for furthering the war effort.

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ADVANCING THERAPY

Sulfathiazole for Gingivitis

For the past eighteen months, reports A. F. Lambke (*Dental Survey* 20:817, 1944) "very gratifying results" have been obtained with sulfathiazole in the treatment of Vincent's gingivitis (trench mouth). Patients showing positive gum smears are first treated with 4 per cent chromic acid. At this time, he is given twenty tablets, each containing 7½ grains of sulfathiazole and instructed to use one tablet in the morning after breakfast and another one hour before retiring at night. The tablets are held in the mouth over or near the most painful areas and the patient is cautioned not to chew them or to otherwise hasten their disintegration, since the longer the drug is in contact with the tissues, the more beneficial the results. For this reason highly compressed tablets which last at least half an hour in the mouth are preferred.

The patient is carefully instructed in the proper mouth hygiene and at the end of ten days a second chromic acid treatment is given, if necessary, or more sulfathiazole is given as indicated. Generally one tablet a day usually suffices, but is unnecessary in most cases.

PVA as Blood Substitute

In checking a new experimental method for evaluating blood substitutes W. Locke (*Science* 99:475, 1944) observed that a solution of polyvinyl alcohol (Type RH 263) better known as PVA, was more than twice as effective as plasma in preventing deaths from tourniquet shock in rats. This is in contrast to other experimental work in which another type of PVA caused many undesirable side effects following its parenteral administration.

When PVA solution was administered, 65 per cent of the animals survived the shock treatment. With plasma, 25 per cent of the animals survived, with saline 40 per cent, with an isinglass solution 25 per cent, while with the untreated control animals, only 8 per cent lived. The work is still in its experimental stages and considerable study is still to be done before a true evaluation of PVA solutions as blood substitutes is forthcoming.

Comparison of Skin Sterilizing Agents

In an experimental comparison to check the effectiveness of skin sterilizing agents preparatory to surgical operations, T. C. Bost (*North Carolina Med. J.* 5:133, 1944) made 1,200 cultures from 600 patients in different months of the year. A 3.5 per cent tincture of iodine was found to be the most effective agent. The incidence of positive cultures obtained with six agents was as follows: 3.5 per cent tincture of iodine, 3.7 per cent; 7 per cent tincture of iodine, 9.5 per cent; Mercresin (o-chloromercuriphenol plus secondary amyl tricresol), 10.3 per cent; Zephiran (alkyldimethylbenzyl ammonium chloride), 10.8 per cent; Merthiolate (sodium o-ethylmercuri-Mercaptobenzoate), 12.8 per cent; and Scott's Solution (surgical mercurochrome), 27.3 per cent. In cases where the application of the antiseptic was not preceded by scrubbing with soap and water, positive cultures were uniformly high; ranging from 67 to 100 per cent. Positive cultures in the summer time were 20.1 per cent as compared with 7.3 per cent in winter and 7.2 per cent in the spring.

Vitamins During Pregnancy

M. I. Balfour (*Lancet* 1:208, 1944) reports that in a feeding experiment conducted in England and Wales, 11,618 pregnant women received supplementary feeding of vitamins A, D, and B complex (in the form of yeast), calcium, phosphorus and iron. The condition of these mothers and the outcome of their pregnancies were compared to those of 8,095 pregnant women who received no supplements under like circumstances. Both classes of women were receiving extra milk in some form. Because there was a significant reduction in the stillbirth and neonatal mortality rates of the group receiving supplementary feeding as compared with the control group, the analysis was thought to show that supplementary feeding of vitamins and especially of yeast during pregnancy is effective in controlling stillbirth rate and mortality of the newborn. A reduction in the maternal death rate was suggested but was not considered to be statistically significant.

Vitamin P for Psoriasis

Because of the relationship between mild injury and psoriasis and between mild injury to the skin and increases in capillary permeability, A. E. Goldfarb (*New York State J. Med.* 44:1111, 1944) thought it of interest to investigate the effect of citrin or so-called vitamin P on the course of psoriasis, since vitamin P has the effect of restoring pathologically increased permeability. The vitamin was administered in the form of a citrin lemonade.

Results of such vitamin P therapy were as follows: Of 45 cases treated 30 improved, 12 showed no change, and 3 became worse. In a group of 17 control cases under treatment with milk sugar orally and petrolatum locally, 3 improved, 3 showed no change, and 11 became worse.

Studies on Atabrine

In experimental studies on rats and chicks, D. M. Hegsted, J. M. McKibben and F. J. Stare (*J. Nutrition* 27:141, 1944) set out to determine whether various dietary regimens affect the toxicity of atabrine (used in large quantities in the fight against malaria) over extended periods. On the basis of their observations, these workers concluded that: 1. Atabrine added to an adequate diet in levels of 25 mg. per kilogram of body weight daily or less is completely nontoxic as judged by growth, general appearance and behavior, gross and microscopic pathologic changes and reproductive ability. 2. Levels of 40 to 65 mg. per hundred grams of ration retard growth by 20 to 30 per cent, the fur is discolored, and the animals are unkempt. The addition of various vitamins, yeast or protein to an already adequate diet does not prevent these changes. 3. The slow growth obtained on sub-optimal levels of riboflavin or protein is further decreased by the addition of 40 mg. of atabrine to 100 Gm. of the diet. With diets suboptimal in vitamin A, addition of atabrine does not cause a further reduction in growth rate. 4. On the basis of rate of growth with diets containing atabrine, the chick is from three to four times as tolerant of the drug as is the rat.

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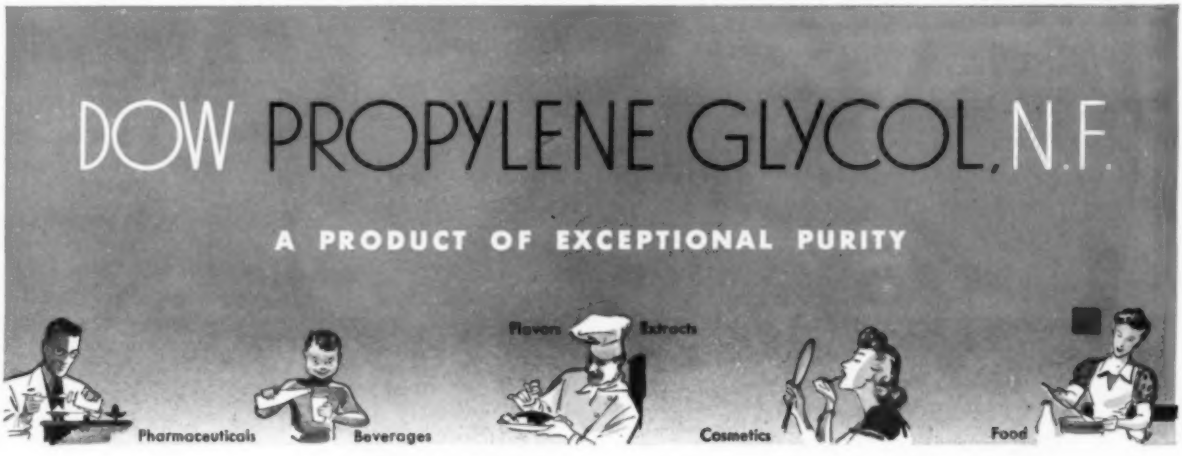

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Rapid Treatment for Scabies

Because scabies, by its annoying and distracting itch, is a source of considerable wartime disability, A. H. Slepyan of the U. S. Navy has developed a clean, simple, non-irritating five-hour treatment for this parasitic condition. Depending for its effects on the well-established action of benzyl benzoate, the speed and efficiency of the lotion or "paint" has been greatly heightened by the use of modern wetting agent, and consists of:

	Gm. or cc.
Benzyl benzoate	250
Duponol C (Du Pont)	20
Aqua bentonite, to make	1,000

The benzyl benzoate is gently poured over the Duponol C in the bottom of a jug. To this the 2.5 per cent aqueous solution of bentonite is added slowly without shaking. The emulsion is then agitated until all of the wetting agent is dissolved.

The technic by which this preparation is employed, as given by Slepyen in the *J.A.M.A.* (124:1127, 1944), is as follows:

1. Remove all clothing, put in bag, either autoclave or send to laundry.
2. Shower, using soap freely. Scrub, with particular attention, the involved areas.
3. Paint entire body from ear-chin line down, covering all folds of body. Use paint brush with long firm bristles.
4. Let dry on skin. Repeat painting in five minutes.
5. Put to bed. Cover with at least two blankets, or sufficient to make patient warm. Keep in bed for four hours.
6. Shower, dry well. Apply calamine ointment if any irritation is noted.
7. Clean clothes.
8. Return to duty with instructions to patient to report for follow-up examinations.

Sodium Alkyl Sulfate for Gastroduodenal Ulcers

Because so much emphasis has been placed on the corrosive action of the acid component of the gastric juice, with almost complete neglect of the role of pepsin in the genesis of gastroduodenal ulcers, S. J. Fogelson and D. E. Shock (*Arch. Int. Med.* 73:212, 1944) set out to determine whether the inactivation of pepsin, rather than alteration of gastric acidity, would permit healing of the ulcer. They were able to demonstrate that the therapeutic agents customarily used in the therapy of ulcer inhibit "peptic" activity only through change of the hydrogen ion concentration and not by direct action on the pepsin. Their next objective was to find a nontoxic material which would inactivate pepsin without altering intragastric acidity. Since it had been shown that surface active agents would denature protein, investigations were made on these substances and it was found that sodium alkyl sulfate was a highly effective pepsin inhibitor. This surface active agent was well tolerated by patients who were given 0.2 Gm. every two hours throughout the day. No toxic effects occurred in either the experimental animal or man in the course of seven months' administration of this dose. All patients sent to the authors for clinical trial of sodium alkyl sulfate were classified as having "intractable" ulcer, because their symptoms could not be controlled by any orthodox management. Twenty-six of 34 patients with gastroduodenal ulcerative disease had their symptoms controlled by sodium alkyl sulfate. Eight patients obtained no relief from this therapy. Two have already had recurrences on cessation of medication despite definite healing of the original lesions. Sodium alkyl sulfate is therefore not a panacea for all patients with ulcer, but it will permit healing of some ulcers that are resistant to all other types of management.

Cartilage Banks

Add cartilage to the growing list of body tissues that can be "banked" for human repair work. According to L. L. Nunn (*Bull. of the U. S. Army Med. Dept.* 74:99, 1944), human cartilage is the most satisfactory medium for the treatment of bony defects of the face, especially of the nose, malar region and supraorbital regions. Homocartilage is the ideal medium for restoration of certain defects in facial contour. Cartilage best suited for implantation is to be found in young healthy persons who have met accidental death. Segments of cartilage are placed in sterile isotonic solution of sodium chloride. They can be prepared either immediately or placed in the refrigerator to be cleaned and prepared within the next forty-eight hours. Segments are placed in a solution consisting of one part aqueous solution of merthiolate and four parts of isotonic solution of sodium chloride. A pint jar is an ideal container. Just before the cartilage is covered with the solution, a culture is made. The jar is placed in the refrigerator and the solution is changed every three weeks. Cartilage thus preserved is inert and can be implanted with impunity, regardless of age, color, sex or blood type of the patient.

Sulfa Plus Hot Baths for Gonorrhea

N. Jones and S. L. Warren (*Am. J. Syph., Gonorrh. & Vener. Dis.* 27:572, 1943) point out that in wartime a relatively small percentage of failures in gonorrhea treated by sulfathiazole becomes numerically and focally a serious problem. The authors suggested that treatment with hot baths and concurrent sulfathiazole administration combine the effects of both an elevated body temperature and a drug, each enhancing the other. After two courses of sulfathiazole have failed to effect a cure, a schedule is suggested which includes 1 Gm. of sulfathiazole every 4 hours, salt and water in copious amounts, and two hot baths daily in water kept at 41.1° C. (106° F.) until the patient's temperature reaches 104° F. Unless contraindications arise, the routine is continued daily until symptoms subside and smears become negative. A white blood count is made daily to guard against sulfathiazole reaction. Because the therapy is comparatively safe and simple, the procedure is considered practical in the treatment of large numbers of patients.

Sulfonamide Aerosol Inhalation

C. C. Chapple and H. M. Lynch (*Am. J. Med. Science* 207:488, 1944) undertook a study to determine whether or not sulfonamide aerosol inhalation would: 1. be the equivalent of topical application in the respiratory tract; supplying a high concentration of the drug to the infected site; 2. prove so efficient that a high level of the drug throughout the body would not be necessary; and, 3. permit absorption of the drug to occur. The results of observations on about 100 persons with infections of the respiratory tract indicate that the answers are in the affirmative.

Administration of various sulfonamides by means of a special blower showed that the drugs are readily absorbed. How absorption takes place is not clearly understood, but it appears that a reservoir is maintained in the respiratory tract for a period of at least six hours. When administered as aerosols by inhalation, the sulfas gave no evidence of drug reactions even though some asthmatic patients were treated. However, large particles produced a severe cough, but such a reaction was never noted when microcrystalline sulfas were used. An analgesic effect was noted by many patients, especially those with pharyngitis or laryngitis. Purulent nasal discharges cleared in a few hours temporarily, and the duration of all symptoms appeared to be shortened.

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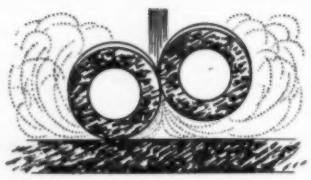

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Compounder's Corner

Synthetic Coal Tar

A synthetic coal tar which is said to overcome many of the objectionable characteristics of crude coal tar, which is widely used in dermatology, is described by Ballinger in the *Journal of the Medical Society of New Jersey* (41:98, 1944). The formula, approved for inclusion in the *New Jersey Formulary*, is as follows:

Anthracene	**1.10 parts**
Naphthalene	**10.90 parts**
Phenanthrene	**4.00 parts**
Carbazole	**2.30 parts**
Picilene	**0.58 part**
Pyridine	**0.58 part**
Quinoline	**0.58 part**
Phenol	**0.70 part**
Cresol	**0.75 part**
Petrolatum, to make	**100.0 parts**

This tar is not prescribed by itself, but is intended to replace full strength coal tar. Illustrative of the use of this newly developed substance is the following simple preparation:

Synthetic stainless coal tar	**5.0 parts**
Paste of zinc oxide, to make	**100.0 parts**

The new synthetic coal tar may also be used in standard dermatological preparations, as in the following modified Guy's Coal Tar Ointment:

Solution of aluminum acetate	**10.0 parts**
Synthetic stainless coal tar	**5.0 parts**
Anhydrous lanolin	**20.0 parts**
Zinc oxide ointment, to make	**100.0 parts**

Beeswax Extender

The International Wax Refining Company, 4415 Third Ave., Brooklyn 20, N. Y. announces the availability of a new beeswax extender. It is said that this wax can be used in any proportion with genuine beeswax or to replace crude, refined and bleached beeswax in the manufacture of ointments, creams, emulsions and other industrial products. Its specifications are reported to be almost identical with U. S. P. quality. Pale yellow in color and without sediment, the wax is claimed to be non-toxic and non-rancid, with excellent stability and emulsifying properties.

Gelose as Agar Substitute

Using the seaweed known as Irish moss (Chondrus crispus) *)which grows in large quantities in the waters along the Canadian east coast, E. J. Reedman and L. Buckby* (Canadian J. Res. *21D:348: 1943*) *prepared gelose, a material with properties similar to those of agar. In their procedure, about 30-60% of the total moss solids were extracted in half an hour by hot water. After filtration with diatomaceous earth and purification with activated charcoal, the extracts were dried by several methods. All methods of drying yielded products capable of forming good jellies. Although agar jellies were stronger than those from equivalent concentrations of Irish moss extract, the addition of 0.2% of potassium chloride produced jellies from Irish moss that were definitely stronger than those from agar. Only potassium salts conferred this increase of strength upon the gelose jellies. Hydrogen-ion concentrations over the pH range from 6 to 8 had no apparent effect upon the jellying strength.*

Glasgow Burn Cream

In a letter to the *British Medical Journal* (March 4, 1944), L. Colebrook describes a cream for the treatment of thermal burns and scalds, which is generally known as "Glasgow No. 9 Cream." This new product, prepared on behalf of the Medical Research Council, consists of:

Cetyl trimethyl ammonium bromide	**1.0 Gm.**
Sulfanilamide	**3.0 "**
Castor oil	**25.0 "**
Beeswax	**1.8 "**
Wool fat	**1.8 "**
Cetyl alcohol	**5.0 "**
Glycerine	**10.0 "**
Water	**52.4 "**

Melt the castor oil, beeswax and wool fat and cetyl alcohol *at as low a temperature as possible.* Dissolve the CTAB in the water with the aid of heat and mix with the oil, etc., at about 60° C. and stir till set. The sulfanilamide is then rubbed up with the glycerine and incorporated, with thorough mixing, in the cream.

The cream should be applied with a knife-blade or spoon previously sterilized by dipping for two minutes in boiling water or passing through a flame. The burn should not be washed before the cream is applied, nor the blisters be snipped. It should not be left on the burn for more than two days, because prolonged application involves a slight risk of inducing a sensitization dermatitis.

New Antiseptic Detergent

Tests have been made by C. N. Iland (Lancet *1:49, 1944*) *on the bacteriostatic properties of a new synthetic detergent or wetting agent called "Phemeride." This is a quaternary ammonium compound containing a long aliphatic chain, and is obtained as a white odorless powder readily soluble in water. It is tertiary-octylphenyldiethoxybenzyldimethyl ammonium chloride.*

From the results of laboratory and clinical tests, this compound appears to have good bactericidal properties, and is non-toxic to the tissues in strengths effective against many pathogenic bacteria. It can be placed in open wounds and the pleural cavity without apparent damage, but no definite conclusions can be drawn from the small number of cases treated. Detergents probably act by disrupting or interferring with the function of the bacterial cell-membrane, and they also have the property of enhancing the potency of other antiseptics when used mixed with them.

Penicillin Solution Stability

Because of the impression, founded on the first crude preparations, that penicillin solutions deteriorate rapidly unless refrigerated, W. M. M. Kirby (*J.A.M.A.* 125:628, 1944) undertook a thorough investigation of penicillin solution stability. His observations indicate that preparations of the sodium salt of penicillin now being furnished by commercial houses are much more heat stable than the earlier, cruder lots. Such solutions have been found to maintain their full potency for a minimum of four days in the incubator and seven days at room temperature, in contrast to the relative instability of the early cruder

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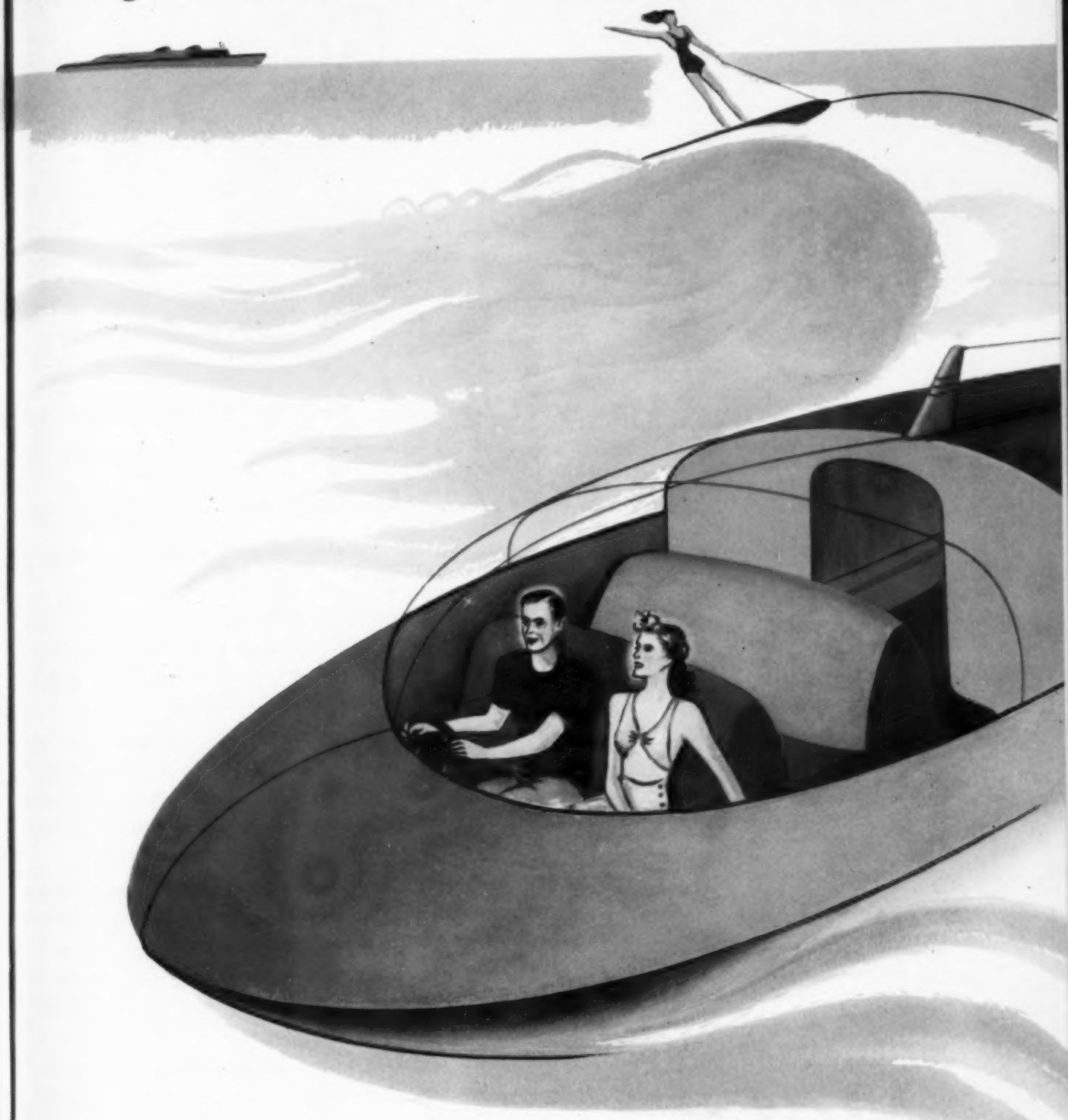

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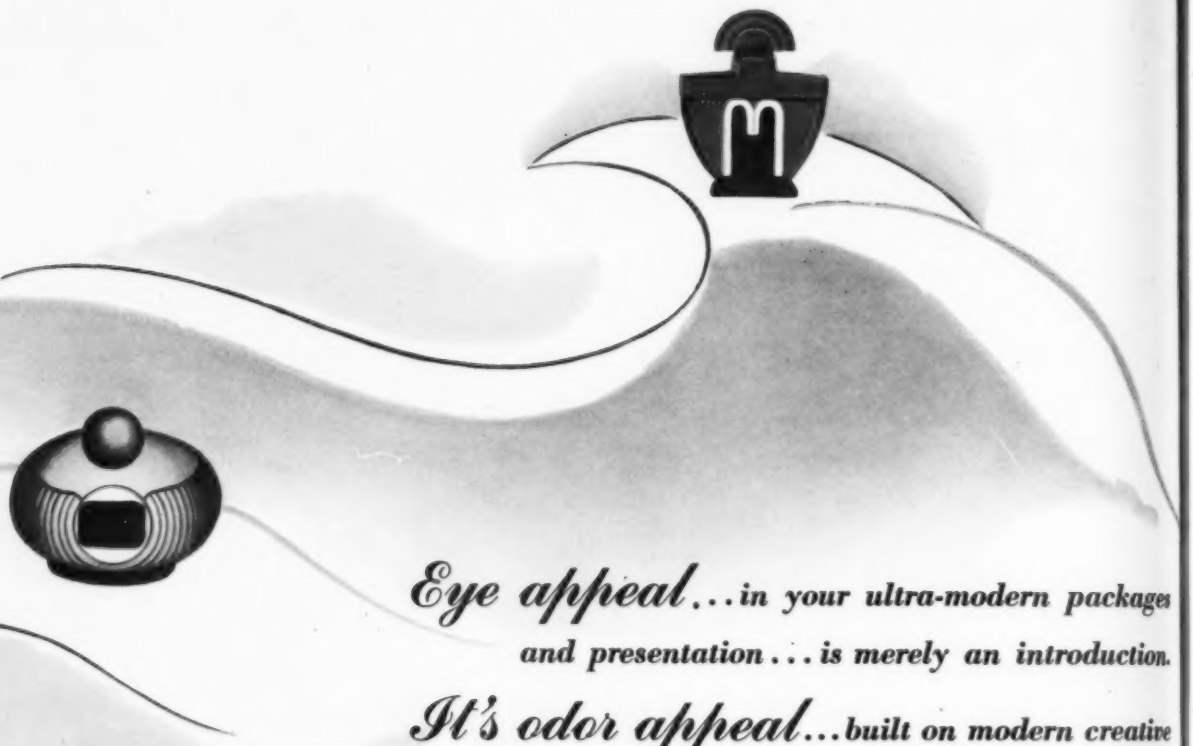

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lots. This is of considerable clinical significance, and it will become even more important when penicillin is available to the general practitioner who will be using it in the home, where there are often no facilities for keeping solutions at 2°C. As a result of this work it would certainly seem safe, in temperate climates, to mix two or three days' supply, either for intermittent intramuscular injection or for continuous intravenous drip, and leave it at the patient's bedside. Even in the summer a full day's supply could be left at room temperature with a considerable margin of safety.

New Itch Remedy

"Circa 42," a new itch remedy, has been developed by J. F. Yeager and C. S. Wilson (J. Lab. & Clin. Med. *29:177, 1944*) *in response to an acute wartime need for a means of preventing or alleviating skin irritations caused by attacks of insects such as chiggers, mosquitoes, etc., and of lessening thereby the danger of infection from scratching.*

The composition of Circa 42 is as follows:

N-butyl-p-aminobenzoate	**100.0 Gm.**
Benzyl alcohol	**170.0 cc.**
Anhydrous lanolin (melted)	**20.0 cc.**
Cornstarch	**640.0 Gm.**
Sodium lauryl sulfonate	**64.0 Gm.**

N-butyl-p-aminobenzoate is dissolved in the benzyl alcohol, which is first warmed, making an approximately saturated solution. Melted lanolin is added, and the mixture kept warm and stirred until as much of the lanolin as will dissolve is in solution. While the liquid is warm, it is added slowly, a little at a time, to a thorough mixture of the cornstarch and sodium lauryl sulfonate, and the whole is kneaded carefully to distribute the liquid evenly throughout the mass. Additional benzyl alcohol, about a tenth the amount already used, is added as before to give the material desired consistency. Final preparation should be a doughy, nongreasy, cakelike material that can be packed in ointment jars (preferably nonmetallic) or other suitable containers.

This material is rubbed onto the skin, previously moistened as desired, until it forms a moderately thick layer over the affected region. No attempt should be made to rub the preparation into the skin. It will dry gradually to a powder, which should be left on the skin undisturbed. Beneficial results are reported from the use of this product in treating mosquito bites, fungus and poison ivy infections, yellow jacket stings and other miscellaneous skin infections accompanied by extreme itching.

Germicidal Aerosol Bombs

One of the chief disadvantages of germicidal aerosols is the fact that special equipment is necessary to obtain the fine spray dispersion required for effective action. Taking cognizance of the efficiency of the liquefied-gas "bomb" method of producing insecticidal aerosols, now finding such wide use with our armed forces, L. D. Goodhue and E. R. McGovern (*Science* 99: 512, 1944) suggest that the same principle could be applied for making germicidal aerosols. They call attention to the suitability of dichlorodifluoro methane for this purpose. Already in use for insecticidal aerosols, this chemical acts as the solvent, furnishes the pressure for spraying and provides the energy to disperse the active ingredients. In addition the gas produced is non-toxic and non-inflammable.

Preliminary tests were made with the following two solutions as germicidal aerosols dispersed by the liquefied-gas method:

1. Propylene glycol	**5.0 per cent**
Ethanol	**20.0 per cent**
Dichlorodifluoromethane	**75.0 per cent**
2. Hexylresorcinol	**0.15 per cent**
Olive oil	**9.85 per cent**
Dichlorodifluoromethane	**90.00 per cent**

These tests clearly indicate the practicability of the method and further investigation is suggested.

Cashew Leaf Dentifrice

According to an article by H. C. Conrad in Agriculture in the Americas *for April 1944, Cashew leaves, when broken into bits, serve as a dentifrice that is claimed to preserve teeth to a ripe old age.*

Pantothenic Acid Hair Preparations

According to a note in *The Perfumery and Essential Oil Record* (35:142, 1944) F. Hoffmann-La Roche Co. A.G., of Basle, in Complete Specification No. 15,652, open to inspection at the Patent Office, London, under the International Convention, describe cosmetic preparations for transcutaneous use in connection with cultivating the hair and preventing it greying and stopping the excessive formation of scurf.

In the Specification it is claimed that cosmetic preparations have now been found which, in many cases, are suitable for checking or preventing the decline in the growth of the hair as well as scurf formation. They are able to promote the growth of the hair, and furthermore, retard, prevent or reverse the greying of the hair. These preparations are characterized in that they contain solutions of pantothenic acid, its next higher methyl homologue, and salts of these acids. The compounds are easily soluble in water and alcohol. Therefore, these solvents are preferred for the manufacture of cosmetic preparations. During the manufacture, other ingredients normally used for the preparation of ointments, pomades, "brilliantines," lotions and other preparations suitable for the treatment of the scalp may be added. The quantity of the biologically active substances which the cosmetic preparations should suitably contain may vary within wide ranges; even low concentrations, for instance, 0.5 per cent have been proved to exert activity in animal tests, while toxic by-effects could not be observed, even if the concentration was as high as 50 per cent.

The new cosmetic preparations are used for promoting the growth of the hair, for inhibiting excessive formation of scurf and retarding or reversing the greying of the hair. Two examples of such preparations, given in the Specifications, are as follows:

I.—50 parts by weight of d(+)—2, 4-dihydroxy—3, 3-dimethyl butyric acid —(3^1-hydroxypropyl)-amide are dissolved in slightly heated 55 per cent alcohol. When this mixture has cooled down, it is dyed and scented. Alcohol is added to bring the volume to 1,000 parts. Similarly, non-alcoholic hair lotions can be prepared.

II.—28 parts by weight of cetyl alcohol, 42 parts by weight of wool fat, 614 parts by weight of petrolatum, and 15 parts by weight of paraffin oil are melted together on a water bath, one part by weight of solbrol dissolved in a fused mass and a slightly heated solution of 50 parts by weight of d(+)—2, 4-dihydroxy-3, 3-dimethyl-butyric acid —(3^1-hydroxypropyl)-amide in 240 parts of water stirred with the mixture while the same is still warm. The mixture is stirred until it is cold and when it has been allowed to stand for 24 hours it is perfumed with one part of essentia aromatica. In an analogous manner other hair creams can be obtained.

Medicated Honey

A note in Chemical Preview *for May-June 1944 states that medicated honey has been obtained from bees in a recent Russian experiment. Bees gather nectar from some eighty varieties of plants and fruits. Honey thus produced contained sulpadin, quinine and vitamin C. Such substances in honey are easily absorbed.*

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PURCHASING DEPARTMENT

Agar Agar Still on Critical Supply List; Domestic Production May Reach 225,000 Pounds This Year

Japan formerly supplied about 90 per cent of the United States normal prewar requirements of agar agar. Our dependence on foreign supplies can readily be seen from the following table:

United States Imports for Consumption—Agar

(Pounds)

Year	*Quantity*	*Year*	*Quantity*
1923	391,824	1933	629,784
1924	404,640	1934	465,326
1925	501,226	1935	451,399
1926	465,832	1936	625,309
1927	383,250	1937	704,258
1928	397,368	1938	588,958
1929	502,626	1939	497,117
1930	408,923	1940	634,555
1931	469,335	1941	597,472
1932	468,999	1942	94,895

Source: Foreign Commerce and Navigation, Department of Commerce.

About 20 per cent of normal requirements were consumed in the preparation of bacteriological media. Agar is essential for the diagnosing of infections such as streptococcus and staphylococcus, diphtheria, and typhoid; for the growing of cultures for the preparation of vaccines against cholera, bubonic plague, typhoid, whooping cough, and many others; and for the testing of the purity of milk and water. Most recently added to the list of its essential uses is its role in the production of penicillin. At the beginning of the penicillin production line in the culture laboratory, the pure organism, penicillin notatum, is bred in test tubes on slants of agar media.

The potential menace to the health service of the Nation through the loss of Japanese agar incited immediate concern for the preservation, solely for vital uses, of existing and potential agar supplies. The restriction in use of agar immediately reduced the requirements from an estimated normal consumption of 500,000 to 600,000 pounds by about 80 per cent. This by no means effected an immediate solution to the problem of meeting bacteriological media requirements from domestic production, as can readily be seen from the history of domestic production.

Back in 1923 a small domestic agar industry came into being as the result of some Japanese fishermen discovering agar-bearing moss in quantity on the Los Angeles breakwater. Only one firm manifested a continuing interest in the agar industry, which failed to expand primarily because of the limited domestic supply of the seaweed, and the readily available supply of Japanese agar.

Pearl Harbor promptly dispelled this indifference. In 1943, two scientists, Robert T. Tschudy and Marston S. Sargent, happened upon the original source of the Japanese seaweed farms off our Pacific Coast. Furthermore, it has been reported that, out of considerable quantities of seaweed found along the coast at La Jolla, Calif., four species of red algae, previously regarded as nonagariferous, yield agar readily and in quantity and quality comparable with that obtained from red algae now commercially exploited.

The ups and downs of the United States agar industry are clearly reflected in the production figures given below:

United States Agar Production

Year	*Pounds*	*Year*	*Pounds*
1923	7,755	1931	28,395
1924	7,281	1932	10,009
1925	117,773	1933	41,557
1926	29,877	1934	1,802
1927	.....	1935	8,061
1928	22,797	1936	n. a.
1929	5,140	1937	21,208
1939	44,895	1938	7,170

Source: Compiled by the U. S. Tariff Commission from data obtained from the sole producer prior to 1934, and subsequently from another single producer.

The scarcity of agar, and the purchase of it by the Defense Supplies Corporation to establish a stockpile, greatly stimulated domestic production, which totaled approximately 52,000 pounds in 1941. While there was only one firm, prior to 1941, which could claim to be firmly established in agar production, now as many as nine are concerned in producing agar not only from Gelidium cartilagineum and the seaweed Gracilaria but from any other agar-yielding seaweeds which might be located and are determined to possess commercial value.

The progress made in surmounting obstacles such as lack of adequate raw material, shoreline restrictions on fishing operations, and priority ratings required for the special type of diving equipment required, is clearly demonstrated in the War Production Board's estimate that with present facilities approximately 225,000 pounds of agar may be produced this year. Of this amount about 90 per cent is expected to be suitable bacteriological media. It is quite possible that with the completion of programmed expansion in agar production facilities, 1944 production from Gelidium may reach 250,000 pounds.

The Government's program includes agar investigations which are being made by the United States Fish and

(*Continued on page 227*)

JULY PRICE CHANGES

UP

Anise oil 25c
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Rectified $2
Caraway oil $4
Lemongrass oil 15c
Pimento leaf oil 15c
Vanilla beans Mex. cuts 25c
Mex. whole 25c

DOWN

Arabic sorts ½c
Balsam Peru 10c
Cedar wood oil 10c
Celery oil $2
Gentian root 6c
Jalap root 5c
Lycopodium 50c
Safrol 20c

• Prices quoted in this section were current on the first of this month.

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DRUG AND COSMETIC INDUSTRY
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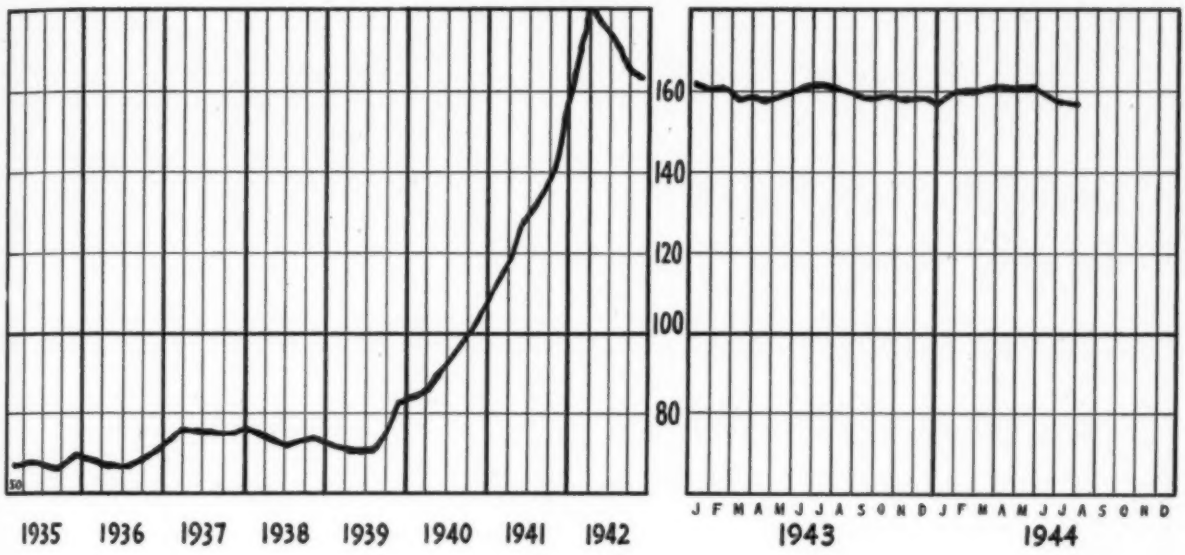
50 Raw Materials—Weighted Price Index. 1926=100.



The price index of fifty commodities for July declined to 156.0 from the previous 156.3.

Lanolin Reported Scarce in Some Quarters; Others Feel Allocation Control Could Be Lifted

Various conflicting reports would indicate that the exact supply position of lanolin is in need of clarification. One trend of thought would indicate that supplies have increased materially as the result of a high rate of operations at wool scouring plants and allocations control. Lanolin is currently employed in large volume as a rust preventative for military equipment, as a prime ingredient in lubricants and ointments, and in surgical bandages.

Normally, cosmetic manufacturers are the largest consumers of this product, but under present WFA allocations they are obtaining very little or no lanolin for this purpose. As bases for many of their products the cosmetic makers have been forced to the use of substitutes.

Some suppliers of lanolin believe that allocation control in this commodity could now be either removed or modified sufficiently to permit its use in the cosmetic and proprietary fields. The oversupply situation, it is contended in these quarters, has reflected in the market for both USP and technical grades through sales under ceilings.

Local distributors and nearby refining plants, however, assert that prices for both crude and refined grades of lanolin are steady at ceiling prices, which have been established through a multiplicity of OPA orders and amendments. It is admitted that the supply position in the product is improved over what it was a year ago, but the gain has not been very considerable.

The War Food Administration, however, can't find the existence of a situation in lanolin that some in the trade think exists. On the contrary, WFA says, there is just about enough available to meet the essential needs, with a little bit left over to keep the cosmetic industry going.

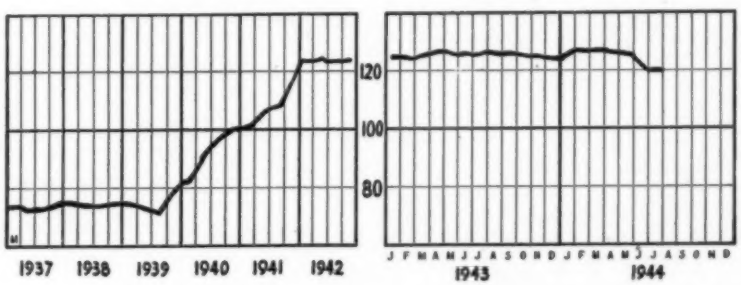
The fact that a supply of lanolin was placed on the market recently at below ceiling prices was not representative of the situation, it is insisted. That was a case where one refiner had built up larger stocks than he needed and to relieve his situation began selling at less than ceiling prices. Sale at below ceiling levels by other refiners was to meet this competition.

After WFA gets through allocating the lanolin supply according to requests made, it has about 150,000 pounds left over every two months. This has been going to cosmetic manufacturers. They could use up to 300,000 pounds a month, instead of 75,000 pounds, if it were there, WFA says, but it just isn't there.

From present indications cosmetic

(*Continued on page 227*)

15 Medicinal Chemicals—Weighted Price Index 1926=100.



The medicinal chemicals index remained without change at 121.4.

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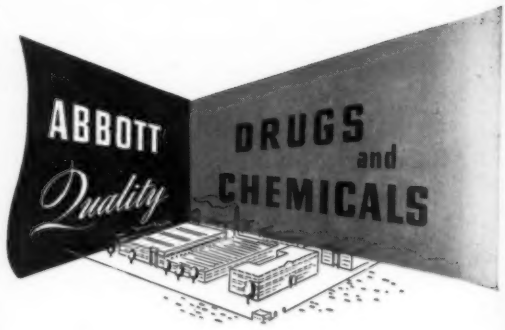

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AGAR

(*Continued from page 223*)

Wildlife Service, in cooperation with the aforementioned Institute of Oceanography. Also, on the Atlantic Coast, investigations are in progress at the Technological Laboratory of that service at College Park, Md. Accordingly, investigations are not being confined to the Pacific coast seaweeds. Laboratory tests are under way on numerous Atlantic coast weeds with the aim of finding a suitable agar substitute. A preliminary report on these findings is contained in the article "The Agar Situation," published in the November 1943 issue of Fishery News, released by the United States Fish and Wildlife Service. The Government program also includes research directed toward promulgation of standard test methods and specifications for bacteriological media.

LANOLIN

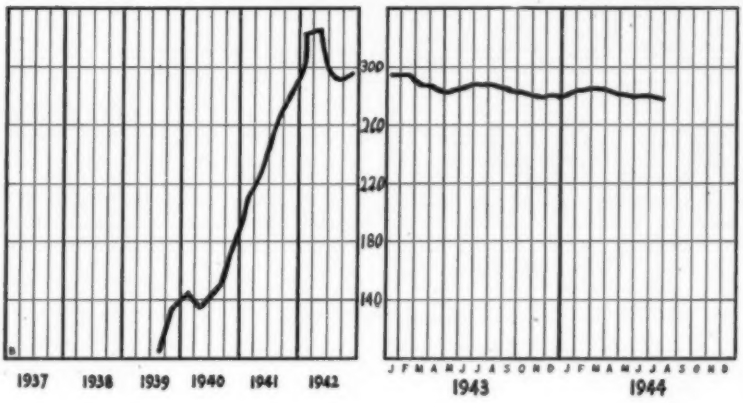
(*Continued from page 225*)

manufacturers will not be getting any more lanolin during the remainder of this year if things continue to run as they are. If matters get worse, so will the availability of lanolin. The best thing to do is to practice a stretching program continuously for at least the balance of 1944.

CRUDE DRUGS

While efforts to stimulate workers to greater activity in the collection of crude drugs has been extensive, the total of domestic gatherings has shown little or no improvement. The results have been far from encouraging as concerns probable stocks during the coming consumption season. While the war news continues highly encouraging, major houses in the drug industry are encountering greater difficulties in obtaining replacements. It will take two years or more after the fall of Germany before anything like a normal flow of botanicals will be witnessed from Europe in the opinion of the trade. Extensive bombing of major railroads on the Continent and the need of many of the botanicals for medical preparations to be used in Europe will tend to delay shipment of these materials to the United States and other countries.

15 Botanicals—Weighted Price Index. 1926=100.



The botanicals index declined to 276.2 from the previous 277.4. Gentian was lower at 41 cents.

Gum Arabic Unsettled

The situation with regard to gum arabic remains unsettled. It can hardly be said that the use of arabic is no greater than a year ago, but the local market continues to be influenced by the presence of fairly substantial stocks. More arabic is being consumed in powdered form than ever before, and shortages of certain other materials have opened up new outlets for whole gum.

Cascara Collections Up

Collection of cascara in Canada will be stepped up considerably this year, but demand will be larger. Canada uses about 300,000 pounds of bark and this must be covered first. However, several million pounds will be available for export, but since 80 per cent of the available supply is held by one factor, prices are expected to be very firm.

Senna Up

Spot prices on Tinnevelly senna leaves show a further advance in sympathy with the bullish reports from the primary center. Local houses are now asking 16c to 17c a pound for No. 1 leaves; 14c to 15c for No. 2; and 10c a pound for No. 3. Nux vomica also moved into higher ground and there was an advance in the price of Mexican sarsaparilla root.

Vanilla Up

The local vanilla bean market is poorly supplied and, according to latest reports, fresh lots of Bourbon beans that had been expected by early August will not appear before the latter part of next month or early September. New crop Mexican cut beans have been meeting with a good demand. Remaining lots are now being offered at an advance with the market at from $7.75 to $8.50 a pound. Whole beans also show an advance with spots offered from $8.75 to $9 a pound. The flow of new crop whole beans into this market will probably continue for another four to five weeks. The quality of the new beans has been found very satisfactory.

Lycopodium Firm

It is believed that the price decline has reached a level of values at which a hardening of quotations may be expected, mainly because basic collection costs preclude much further movement of prices in favor of buyers.

Gum Aloe Production

The production of gum aloes is an important activity in the Netherlands West Indies. Approximately 600 cases were produced during the first quarter of 1944, and stocks on hand totaled approximately 1,700 cases. Exports to the two principal markets, the United States and Great Britain, were 800 cases.

Prices of aloes dropped from the high level of between 58 and 60 cents per Dutch pound (one-half kilogram) during the third quarter of 1942 to between 29 and 34 cents in April. The current crop outlook is reportedly unpromising because of the lack of rainfall.

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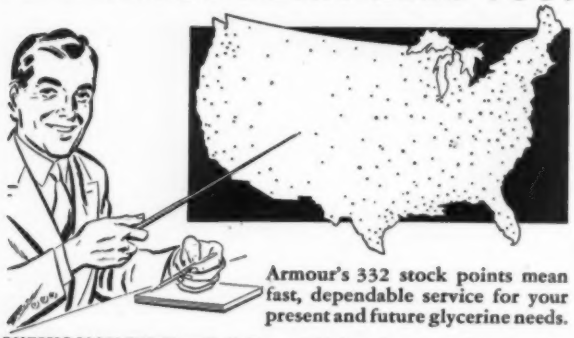

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ESSENTIAL OILS

Activity in the market for essential oils and aromatic chemicals continued good during the period under review. Anise oil is very scarce. Only second hand lots turned up from time to time. The Department of Agriculture announced that the peppermint crop was progressing favorably. It is now definite that the Italian oils recently received here will not be released for general civilian use. Arrival of lemon oil from Brazil was a feature and since Brazilian orange oil is again appearing on this market this development will materially encourage suppliers who have had difficulty in meeting the warm weather demand for citrus oils.

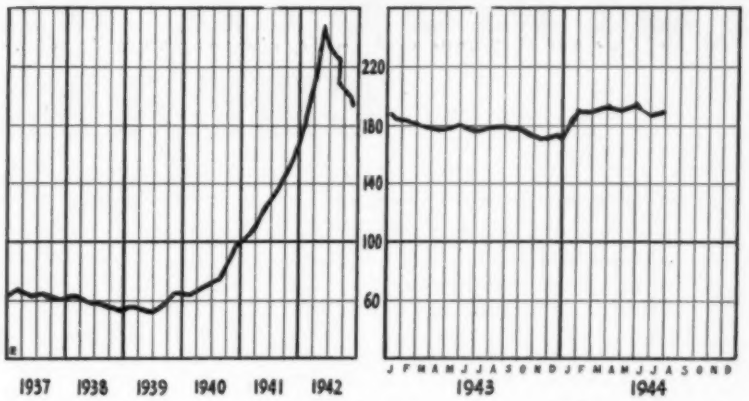
Peppermint Crop Good

The Bureau of Ag icultural Economics, Department o' Agriculture, state that mint looks very good in Indiana with the exception of a few weedy spots. Hot winds have done some damage but the crop as a whole has not been seriously affected. Harvest should begin in about three weeks. Mint in Oregon on July 1 was in considerably better condition than it was a year ago and despite a backward Spring, prospects are good. Harvesting is expected to begin about August 20. Dry and windy weather has not been favorable for new plantings in the main Benton County district of Washington. More fertilizer was used this year and better care is being taken of the plantings. Fields in Wahkiakum County will be several weeks later than usual because of too cool weather. Cool nights in Yakima County are holding back growth; runners are just getting started and prospects are good. Harvesting of 600 acres in Cowlitz County is expected October 1. No report was made on the condition of the Michigan crop.

Lemon Oil Scarce

Arrival of about 100 cases of Brazilian lemon oil has created considerable attention especially since the oil is believed to have cost nearly $4 per pound and OPA recently established a maximum selling price on lemon at $3.25 per pound. Domestic lemon oil is virtually all sold so that the ceiling, according to some in the trade, is only serving to discourage importations from Brazil when the merchandise could be used here until such time as greater quantities may be obtained from Sicily.

15 Essential Oils—Weighted Price Index. 1926=100.



The essential oils index advanced to 174.6 from previous 173.9. Anise oil rose to $4., and cananga oil jumped sharply to $11.50.

Lemongrass Up

Spot goods were offered at from $1.50 to $1.60 per pound and were exceptionally firm because of the large consumption versus the moderate unsold stocks. Because of the higher cost of lemongrass prices on ionones show advances. Alpha ionone has been advanced to $4, beta to $6.15, and methyl to $4.25 per pound.

FINE CHEMICALS

There were comparatively few price changes in the fine chemical market during the preceding month. Reports indicate some contraction of business and a turn toward a quieter market. Mercury continued to be an item of some interest in view of the fact that Italian mines are now in Allied hands, and that import restrictions have been lifted. A further decline was noted in the price of ascorbic acid, riboflavin and thiamine hydrochloride. The War Production Board reported decreased military demand for glycol ethers.

Vitamins Down

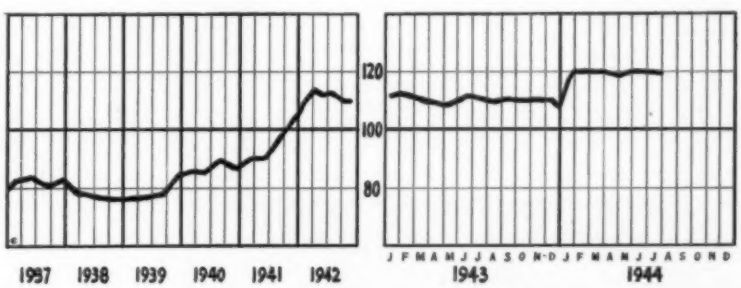
Producers of ascorbic acid USP XII announce the new and lower schedule: 500 ko. quantity $24.50 per kilo; 25 and 50 ko. f. drum, $25 per kilo. Thiamine hydrochloride is also lower at $180 per kilo in 500 gram bottle. Riboflavin has also been repriced and is now available at $230 per kilo in 100 gram bottle.

Alcohol Production Higher

The War Production Board has announced that during the first four months of 1944, production of alcohol amounted to 192,000,000 gallons. This compared with the 137,000,000 gallons produced during the same period of 1943. Total 1944 supply is estimated at 612,000,000 gallons. The present stockpile is 86,000,000.

Consumption, however, involves such huge quantities that it is virtually certain civilian requirements will not be adequately supplied. It is said distillers will have first call on any surplus stocks which may eventually develop in order to stave off bootlegging.

25 Cosmetic Raw Materials—Unweighted Price Index. 1926 =100.



The cosmetic raw materials index declined to 113.1 from the previous 113.5. Balsam Peru was lower at $1.15 per pound.

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Eczema

(Continued from page 165)

Following a course of treatment with stimulating ointments it is common practice to treat the skin with bland preparations such as calamine-zinc oxide preparations, Lassar's paste or a weak boric acid ointment. Where itching is severe, an ointment containing 1 or 2 per cent of resorcinol or a proportion of salicylic acid may be used cautiously to relieve this symptom. A simple preparation, such as the following[11] may be applied to itching areas as required:

Salicylic acid	**0.3 Gm.**
Menthol	**0.6 Gm.**
Rose water ointment	**30.0 Gm.**

Chronic Condition

In the chronic stage the skin is thickened and leathery with a hard, dry surface. It is not red as in the more acute forms but there is generally an increased brownish or brownish-blue pigmentation. Various medicaments are useful. According to Andrews[10] salicylic acid, tar, sulfur or mercury give the best results and are usually well tolerated when used in conjunction with controlled irradiation. Crude coal tar appears to be especially useful in non-hairy areas and the military manual[6] suggests the use of from 3 to 5 per cent of this drug, according to indications, dispensed in a water-soluble emulsion base. Crude coal tar paste, as in the following formula, is also recommended:

Crude coal tar	**4.0 Gm.**
Zinc oxide	**4.0 Gm.**
Castor oil	**4.0 Gm.**
Corn starch	**30.0 Gm.**
Petrolatum	**26.0 Gm.**

A mild, stimulating ointment, useful in treating dry, chronic eczema is quite simple and consists of:

Ichthyol	**3.0 Gm.**
Zinc oxide ointment, to make	**100.0 Gm.**

Medicated collodion films are often valuable.[11] Thus, a preparation useful for obstinate itching in chronic eczema is made from:

Juniper tar	**4.0 cc.**
Flexible collodion	**30.0 cc.**

When thickened epidermis needs removal, peeling can be effected with a salicylic acid film such as:

Salicylic acid	**1.3 Gm.**
Flexible collodion	**30.0 cc.**

Specific Forms

Only brief consideration can be given to the more specific forms of eczema, since in the main their treatment follows the methods mentioned above. Of the several distinctive forms of eczema, contact eczema or contact dermatitis is probably the most important.

Itself divided into several subgroups, contact dermatitis includes plant dermatitis (due to poison ivy and related growths), occupational dermatitis and the several skin conditions resulting from sensitivity to alkalis, furs, dyes, resins, and numerous other substances. Poison ivy dermatitis[17] and occupational dermatitis[18] have received rather extensive discussion in this publication and so need not be further considered here.

Contact Dermatitis

In the very acute stages of contact dermatitis, soothing lotions and compresses are indicated. Burow's solution, diluted 1:8, potassium permanganate 1:5,000 and saturated boric acid solution are all useful. As the eruptions become drier and more scaly, calamine lotion with olive oil is employed.[9] If the zinc oxide component of this lotion proves too irritating, Brunsting[19] recommends the substitution of the following cornstarch formula:

Prepared calamine	**16.0 Gm.**
Starch	**48.0 Gm.**
Glycerine	**0.2 cc.**
Liquefied phenol	**0.2 cc.**
Distilled water, to make	**250.0 cc.**

When small patches of localized dermatitis are present, this dermatologist suggests that the use of powdered benzoyl persulfide by inunction will relieve pruritus for three or four hours.

Atopic Dermatitis

Atopic dermatitis, another of the common forms of eczema, especially in infancy, is an allergic condition associated with hay fever, asthma and the like. Treatment is along conventional lines except that milder skin preparations are indicated. Search for the irritating causal factor is highly important, but often the management of this type of eczema taxes the ingenuity and patience of the physician. Specific or nonspecific desensitization is often tried, with variable results.[8] A few years ago, Sheldon and his associates[20] reported that patients with atopic eczema seemed to show definite benefit from histamine azoprotein therapy.

Nummular Dermatitis

Nummular eczema, as its name implies, is characterized by coin-like lesions. Its cause is unknown. It shows a chronic and often recurrent course, but generally there is an eventual cure. Solutions containing 0.1 to 1.0 per cent of silver nitrate are used as wet compresses in the acute and subacute stages. Later crude coal tar preparations are favored.[6, 21] Vitamin A in large doses by mouth, as a part of the regimen, has yielded good results in this type of eczema.[22]

Because of its frequency and because of its distressing nature, infantile eczema warrants more space then can be given here. The disease, considered as a separate

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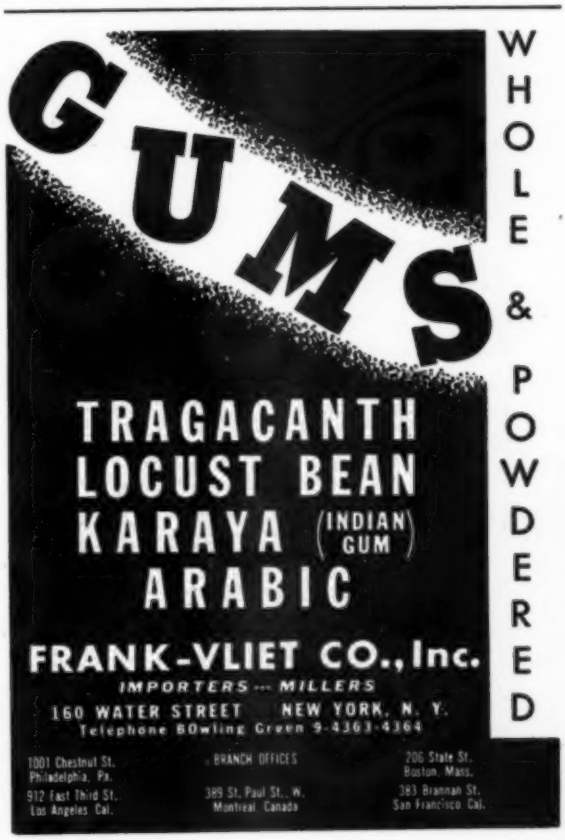

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Eczema

(*Continued from page 233*)

entity by most dermatologists, has received extensive study[4, 23, 24, 25] and detailed consideration by dermatologists,[3] allergists[26] and pediatricians.[27] Mild, soothing, antipruritic lotions and dressings have a most important role in the treatment of this condition, especially in the acute stages.

However, there seems to be good agreement among dermatologists that crude coal tar is probably the most useful agent in the treatment of infantile eczema. According to Osborne and his associates,[24] crude coal tar, beginning with a 2 per cent strength, is extremely valuable as a local application in eczema of infants and children, not only in the subacute and chronic cases, but also in most acute cases. These workers prefer a washed, distilled crude coal tar put up in a vanishing cream base and containing about 10 per cent of zinc oxide.

Infantile Dermatitis

Another efficacious preparation of this type can be prepared with 6 per cent each of crude coal tar and zinc oxide in petrolatum.[11] In contrast to such preparations, Sulzberger[3] has found that the direct application of undiluted tar, painted directly on the face in a thick layer and covered with purified talc, to be "one of the very best of all methods of tretament." This treatment is used after the worst of the crusting and impetiginization has been eliminated.

Quite recently Abramowitz[28] reported that acute types of infantile eczema had responded to treatment with sulfur paste (30 to 50 per cent sulfur in petrolatum), where crude coal tar had proved ineffective.

Secondary Infection

Secondary infection is a frequent complicating factor in eczema, and it must be treated by appropriate measures. As might be expected, the sulfonamide drugs have found use in controlling such infections. While the sulfas have no effect on eczema as such,[29] Keeney and his coworkers[30] have found sulfathiazole to be effective in treating infected eczema of both adults and infants. For this purpose they used a 5 per cent sulfathiazole ointment prepared by suspending finely powdered and sifted sulfathiazole into equal parts of hydrous wool fat and vanishing cream. More recently, however, other workers[31] have warned that the use of this sulfa drug in eczema may produce undesired effects in susceptible persons.

Diet as a Factor

Diet has long loomed large as an etiological factor in eczema. As has been recently pointed out,[32] however, eczema has probably been blamed on food more frequently and consequently treated by diets of various types more often than any other skin condition. Un-

fortunately the results have usually proved disappointing. Nonetheless, investigators have persisted in searching out dietary factors which influence eczema and its course. One result of such work has been the growing use of amino acid as substitutes for protein foods for allergic infants.[33] Other milk substitutes have also been made available.

Fat Metabolism

Studies on fat metabolism in patients with eczema by a group of workers[34] indicated that this food component may play an important role in the disease. Feeding lard to a group of patients has resulted in clinical improvement in most of them. Pertinent in this connection is the very recent report of Pottenger[35] on the therapeutic value of a thermolabile factor found in fats, particularly the lecithins, in dermatoses, including eczema.

Radiation Therapy

Radiation therapy is of very frequent value in various stages of eczema. According to the military manual,[6] for example, superficial X-ray treatment is a sovereign palliative measure for all forms of subacute and chronic eczema-dermatitis. Andrews[10] is similarly enthusiastic concerning the results obtained by such measures, but warns of the special hazards that exist. Referring to the use of ultraviolet rays, this authority believes that such light treatment is so efficacious as to be given in almost every case of infantile eczema. This type of light treatment can be substituted by sun baths during the summer months.

BIBLIOGRAPHY

1. Sutton, R. L. & Sutton, R. L., Jr.: "An Introduction to Dermatology," Ed. 4, St. Louis, Mosby, 1941. pp. 131-2.
2. Wright, C. S.: J. Michigan Med. Soc. 42:105, 1943.
3. Sulzberger, M. B.: J.A.M.A. 112:38, 1939.
4. Downing, J. G.: J.A.M.A. 115:813, 1940.
5. Goodman, H.: "Treatment of Common Skin Diseases," New York, Hermes, 1937, pp. 114-5, 131-2.
6. Pillsbury, D. M., Sulzberger, M. B. & Livingood, C. S.: "Manual of Dermatology," Philadelphia, Saunders, 1943, pp. 169-200.
7. MacCormac, H.: Brit. Med. J. Nov. 27, 1943.
8. Tobias, N.: "Essentials of Dermatology," Philadelphia, Lippincott, 1941. pp. 53-74.
9. Swartz, I.: New York State J. Med., May 15, 1942.
10. Andrews, G. C.: "Diseases of the Skin," Ed. 2, Philadelphia, Saunders, 1938, pp. 171-184.
11. "Merck Manual of Therapeutics and Materia Medica," Ed. 7, Rahway, Merck, 1940, pp. 399-410.
12. Council on Physical Therapy: J.A.M.A. 121:127, 1943.
13. Simon, F. A.: J.A.M.A. 125:350, 1944.
14. Hampton, S. F. & Cooke, R. A.: J. Allergy 13:63, 1941.
15. Grimes, S. E.: Canadian M.A.J. 44:164, 1941.
16. Editorial: Med. World 61:42, (Jan.) 1943.
17. Lesser, M. A.: Drug & Cosmetic Ind. 50:385, 1942.
18. Lesser, M. A.: Drug & Cosmetic Ind. 46:285, 1940; ibid. 53:630, 1943.
19. Brunsting, L. A.: J.-Lancet 60:438, 1940.
20. Sheldon, J. M., Fell, N., Johnson, J. H. & Howes, H. A.: J. Allergy 13:18, 1941.
21. Smith, D. H.: Southern Med. & Surg. 106:49, 1944.
22. Gross, P.: Arch. Dermat. & Syph. 44:1060, 1941.
23. Perlman, H. H.: Urol. & Cutan. Rev. 47:109, 1943.
24. Osborne, E. D., Jordon, J. W. & Hallett, J. J.: New York State J. Med. 42:47, 1942.
25. Editorial: J.A.M.A. 120:490, 1942.
26. Rappaport, B. Z. & Hecht, R.: J.A.M.A. 112:317, 1939.
27. Hill, L. W.: J.A.M.A. 111:2113, 1938.
28. Abramowitz, E. W.: New York State J. Med. 43:746, 1943.
29. Abramowitz, E. W.: Am. J. Pharm. 114:250, 1942.
30. Keeney, E. L., Pembroke, R. H., Chatard, F. E. & Ziegler, J. M.: J.A.M.A. 117:1415, 1941.
31. Cohen, M. H., Thomas, H. B. & Kaleeb, A. C.: J.A.M.A. 121:408, 1943.
32. Buchanan, R. N., King, H. & Hamilton, C. M.: Tennessee M.A.J. 36:89, 1943.
33. Hill, L. W.: J.A.M.A. 116:2135, 1941.
34. Finnerud, C. W., Kessler, R. L. & Wiese, H. F.: Arch. Dermat. & Syph. 44:849, 1941.
35. Pottenger, F. M.: South Med. J. 37:213, 1944.

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(Continued from page 167)

Bulk density, which is closely related to particle size, can be determined according to the simple, almost primitive method recommended by the Toilet Goods Association. Moreover particle sizes and shapes can be examined under the microscope. Finally, if your laboratory is capable of handling it, an analysis for the presence of lead and other heavy metals should be run.

Processing Most Important

The manufacturing process itself assumes larger importance with regard to face powder than the formulation. Here considerable changes have taken place in the course of years. In the old days it was sifting. Nowadays it is highspeed pulverizing. Both preceded by simple mechanical mixing. Also, in the past the incorporation of the perfume oils has been quite a job. Today the oils are sprayed into the mixture of powders and the pulverizing takes care of even distribution. The strength of perfume oil concentration has gradually gone down. This has to do with the evolution of face powder from a luxury item to a popular daily cosmetic. When it was the former, from one to two per cent of perfume was considered right, and could be afforded. But in our day ½ per cent and less is more nearly representative of average usage.

Plant Conditions

Finally the whole handling of face powder has been improved. A face powder plant used to be a filthy place, continuously full of dust. Probably quite a few are still that way. But it need not be so. Transfer of the materials can be handled largely in dust-tight containers and ducts. Lavish use of exhaust equipment, not only in the form of hoods and fans, but right at every spot around the machinery, where the dust has a chance to escape will permit only little powder to settle on floors and equipment. And if this is vacuumed often, the place will be clean. Whenever an operation remains which cannot be made dustproof the workers should wear masks, even if they are inconvenient . . . permanent health is more valuable than the avoidance of temporary discomfort.

Reader's Question

PRESERVATIVE FOR LIQUID ROUGE: I would appreciate having a recommendation from your technical editor for a preservative against molds to be used in a liquid rouge. It consists of water, color and glycerine or propylene glycol. San Francisco.

As a preservative for your liquid rouge I would suggest that you try either benzoic acid 0.1-0.2% or methyl parahydroxybenzoate employed in a concentration of 0.15%.

READERS' QUESTIONS

HAND CREAM: I would like the advice of your cosmetic expert regarding the formulation of a hand cream. I have been experimenting with a variety of materials but I have had very little success in getting just what I want. Please inform me also as to what effect the addition of sodium lauryl sulfate has in a vanishing cream and what per cent is used. San Francisco.

I would suggest that you start off with this formula:

Glyceryl monostearate	12.0
Hydrous wool fat or lanolin	3.0
Cetyl alcohol	2.0
Glycerin	18.0
Distilled water	64.5
Perfume	0.5

The consistency of this greaseless hand cream may be adjusted by increasing or decreasing the amount of glyceryl monostearate or by the addition of a small proportion of wax.

The addition of sodium lauryl sulfate in a vanishing cream would probably increase its wetting and cleansing properties. I would suggest that from 1 to 2 per cent would be sufficient addition to an ordinary vanishing cream.

ALCOHOL-FREE HAIR LOTION: Will you advise me as to what solvents are used in modernized hair lotions besides ethyl and isopropyl alcohol. In my experience alcohols dry and irritate the scalp if used over long periods. Cholesterol seems to be fine in a hair lotion, and perhaps a cholesterol compound might do. The big question is a safe solvent. Stockton.

I know of no complete substitute for alcohol in hair lotions although glycerin has been suggested occasionally. However, glycerin serves largely as an emollient and hygroscopic agent in such preparations. Probably your only alternative would be to employ an alcohol-free lotion such as the following Cholesterin Scalp Lotion suggested by Goodman:

Cholesterin	1.0
Liquid petrolatum	6.0
Sodium choleate	0.4
Glycerin	6.0
Borax	1.0
Water, enough to make	100.0

FOAMY DENTIFRICE: I would greatly appreciate it if you could supply information or formulas for foamy dentifrices. New York City.

Foamy dentifrices are based on the action of synthetic detergents which must of course be non-toxic. A typical formula would consist of:

Detergent	1.0–3.0
Alcohol	10.0
Flavor	1.0
Tragacanth	1.0
Glycerin	15.0
Water to make	100.0

The detergent is dissolved, along with the flavor, in the alcohol and the powdered gum tragacanth is stirred with this alcoholic solution. This mixture is then poured with stirring into the mixture of glycerin and water.

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The Vitamin Market

(*Continued from page 159*)

concentrates, tablets, and capsules, of approximately $93,800,000, while the manufacturers who advertise to the public do a business in these items totaling approximately $46,200,000.

Of the most widely advertised and therefore of the most well-known vitamin producers who advertise direct to the public, the first seven are said to do a business approximating only 12½ per cent of the total market. This means that these seven leading sellers of proprietary type vitamin products do a total business of only $17,500,000 out of a market which totals $140,000,000.

In the ethical field one manufacturer does far more business with a single item—a multi-vitamin capsule—than all these seven proprietary vitamin sellers put together. This manufacturer's total sales of vitamin products is said to account for 24 per cent of the total vitamin market, or a dollar volume on this one item of $33,600,000. This leaves only 76 per cent for all other manufacturers, both ethical and proprietary.

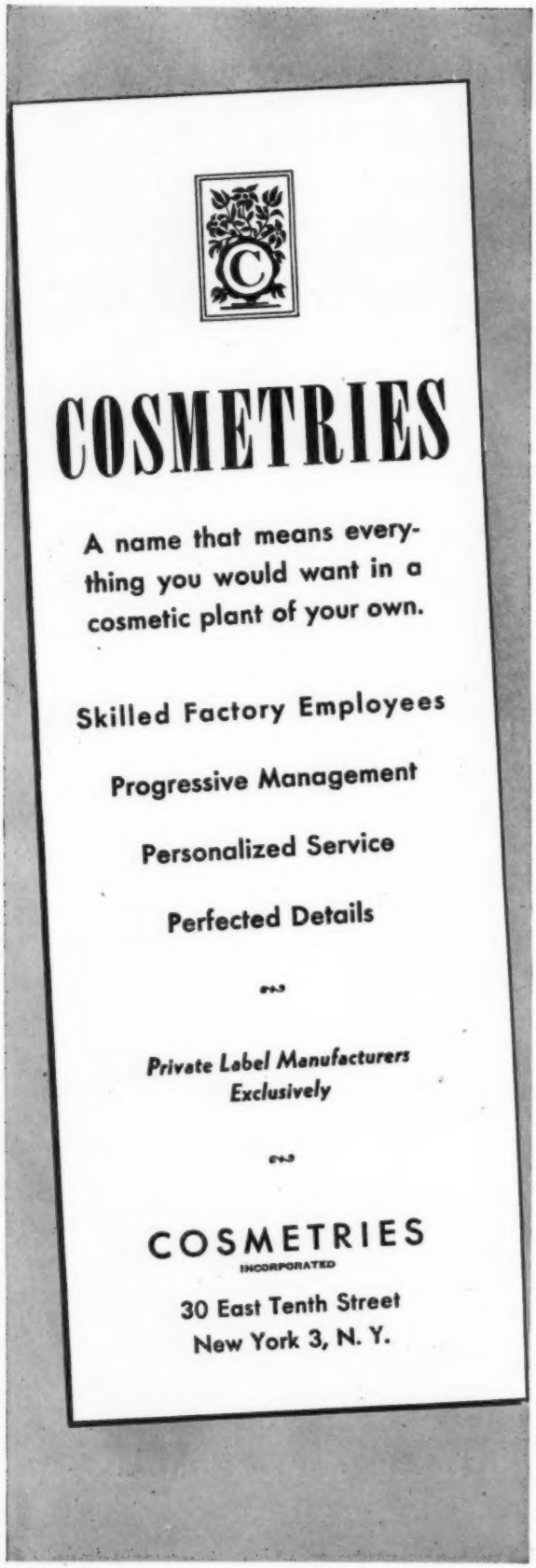
It is estimated that 54 per cent of the vitamin products sold are used on the prescription or recommendation of a doctor, thus accounting for the sale of at least 54 per cent of the ethical products. The sale of the remaining 13 per cent to make up the 67 per cent sold by ethical houses results from recommendations by friends who have been to doctors or by pharmacists.

How the ethical manufacturers maintain their large percentage of the business is a mystery to many people, but the answer is simple. The percentage is maintained

by the one method of promotion which ethical houses mainly rely upon—detailing of doctors. The ethical manufacturer who accounts for 24 per cent of the business with his famous multi-vitamin capsule is said to maintain a detail force of some 640 men calling upon doctors throughout the country. Other large ethical manufacturers maintain detail forces of somewhere in the neighborhood of 400 to 450 men. To cover the doctors of the country thoroughly, it is said that a well-trained detail force of 600 is essential, although due to the manpower shortage at the present time most manufacturers are having difficulty keeping their detail forces up to the number which they would like to have.

The trend in the vitamin market is toward increased use of multi-vitamin capsules. Recently there was a sharp upward movement in the sale of vitamin B complex preparations but this appears to be leveling off with the multi-vitamin preparations still increasing in volume.

The complete vitamin story is as yet far from unfolded. Several vitamin B factors, not prominent now, might become of real importance later on. The real story of pantothenic acid has not been revealed as yet. The value of vitamin B_6 is still unknown. Deficiency of a still unused vitamin causes complete loss of equilibrium in rats. The importance of vitamin K is well established, but the use of vitamin P—which apparently produces astounding results in some conditions—has not become widespread. But as the picture unfolds, it will be told through scientific and clinical research. Thus the doctors will continue to be the main promoters of vitamin products and the bulk of the business will probably remain in the hands of ethical manufacturers for a long time to come.



READERS' QUESTIONS

BURN PREPARATIONS: We would like to add a burn salve to our list of safety devices. Can you recommend a salve that will be (a) Analgesic (b) germicidal (c) promote healing? San Jose.

These properties are the aims which all burn preparations try to achieve. However, in view of the fact that different types of burns require different types of treatment, and that the conception of what constitutes proper burn therapy is undergoing frequent changes according to new discoveries, I cannot be specific in recommending any particular burn preparation for general use. The Office of Civilian Defense recommends the use of sterile boric acid ointment or petrolatum in the first aid treatment of burns.

The present situation on burn treatment for minor burns has been recently summarized by R. D. McClure and C. Lam, at the Chicago Congress of Industrial Health. They advise:

1. Wash the burned part if it is dirty, using white soap and water, but being careful not to wash raw areas.
2. Do not break blisters or otherwise debride the burn.
3. Cover the burn with a piece of fine mesh gauze impregnated with petrolatum or boric ointment. If you do not have this specially treated gauze, put the petrolatum or boric ointment directly on the burn and cover with gauze.
4. Apply a dressing large enough to keep out the dirt and maintain some pressure.
5. Change only the outer dressing as necessary.
6. For more severe burns of the hand, apply more pressure with cotton waste.

These physicians advise against use of tannic acid preparations and the employment of sulfa drug preparations. They especially stress that the blisters be left unbroken because the plasma in the blister serves a very important function.

ARMY INSECT REPELLENT; DELOUSANT: In my post-war plans I am interested in marketing an insect repellent similar to that used by the United States Government. I am also interested in a delousant containing phenyl cellosolve. Brooklyn.

The formulas for the Army insect repellents were published in the June 1943 issue of DRUG AND COSMETIC INDUSTRY but since you probably do not have available that issue, I am reproducing the formulas for your benefit.

	grams
Hydrogenated castor oil	25
No. 612 Repellent	30
Color mixture	38
Phenyl mercuric benzoate	0.004
Beeswax, yellow	4
Lanolin, anhydrous	3

Hydrogenated castor oil	25
No. 612 Repellent	25
Color mixture	38
Phenyl mercuric benzoate	0.004
Dimethyl phthalate	5
Beeswax, yellow	4
Lanolin, anhydrous	3

Number 612 repellent has been identified 2-ethylhexanedio-1, 3. This is manufactured by Carbide & Carbon Chemicals Company, but is not yet available for civilian use.

A modern delousing solution containing phenyl cellosolve was recently described in the J.A.M.A. and the article with formulas was abstracted in the January 1944 issue of DRUG AND COSMETIC INDUSTRY, page 93.

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READERS' QUESTIONS

EYE LID CREAM: What is the composition of an eye lid oil? Chicago.

I presume that what you mean is an eye lubricating cream and not an eye shadow cream. A typical eye lubricating cream can be made from:

Lanolin	**50**
Petrolatum	**20**
Olive oil	**20**
Castor oil, enough to make	**100**

DERMATOLOGICAL VEHICLE: I would like to prepare a vehicle for dermatologic use into which medication such as crude coal tar, oil of juniper and similar other medications could be incorporated. New York City.

I would suggest that you try White Ointment or Yellow Ointment as given in the U.S.P. XII. Paste of Zinc Oxide N.F. VII is also a good vehicle for coal tar.

LIQUID MASSAGE LOTION: We would appreciate a formula for a liquid rolling lotion. We understand that these lotions have a paraffin base. Memphis.

I presume you mean a liquid massage lotion. A very simple preparation of this type can be prepared from the following:

Castor oil	**8.0**	**parts**
Olive oil	**16.0**	**"**
Liquid petrolatum, enough to make	**100.0**	**"**

HAIR PREPARATIONS: I understand that isopropyl alcohol is being used in the manufacture of hair oils. Can you give me a formula for a hair oil containing isopropyl alcohol? I would also like a formula for a hair dressing containing lanolin. Kansas City.

Isopropyl alcohol has been employed in the past in the preparation of hair products but it has been used more extensively during the last year or so, largely as a substitute for ethyl alcohol because ethyl alcohol is unobtainable. However, isopropyl alcohol is almost as scarce and is under allocation.

However, formulas containing isopropyl alcohol are available, as for example, the following scalp lotion:

Cholesterin	**1.0**
Lecithin	**0.4**
Castor oil	**4.0**
Alcohol or isopropyl Alcohol, enough to make	**100.0**

Dissolve cholesterin and lecithin in heated castor oil. Add alcohol or isopropyl alcohol and mix.

With regard to a formula for a hair dressing containing lanolin, I would suggest that you experiment with a basic formula such as the following:

Stearic acid	**10.0**
Mineral oil	**4.0**
Lanolin	**2.5**
Potassium hydroxide	**0.5**
Water to make	**100.0**

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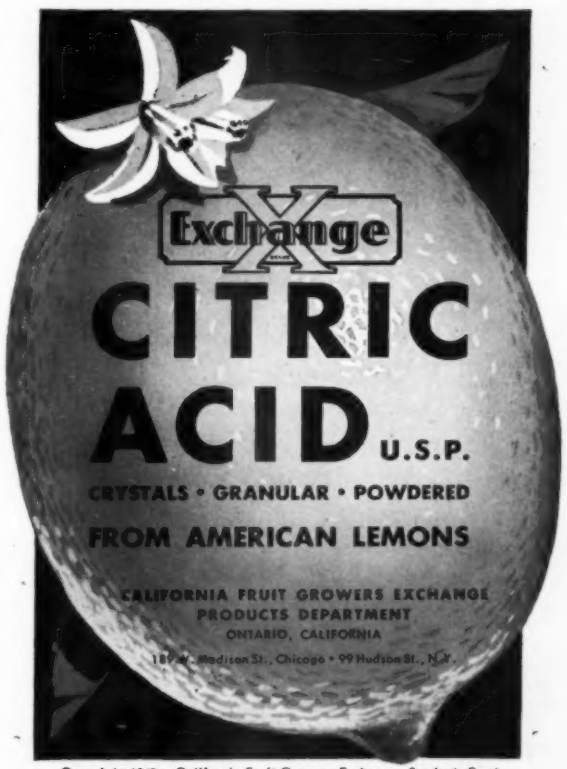

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READERS'

NON-GREASY SUN TAN LIQUID: Can you supply me with a formula for a non-greasy sun tan liquid? New York City.

The following formula has been used quite successfully:

Stearic acid	3.0
Cetyl alcohol	0.5
Sun screen	5.0
Potassium hydroxide	0.1
Borax	0.2
Quince seed	1.0
Water	90.2

This is manufactured in the usual way. Soak the quince seed (with 0.1 parts of methyl para-hydroxybenzoate as preservative) in half of the water overnight and then strain through cheesecloth to obtain a clear mucilage. Melt the stearic acid, cetyl alcohol, and sun screen together and emulsify by means of the solution of potassium hydroxide and borax in the rest of the water. Add the quince seed mucilage and stir gently until a homogeneous liquid cream results. Various efficient sun screens are available from the manufacturers listed in our advertising pages.

DEPILATORY INGREDIENTS: We would appreciate information on depilatory agents. Due to the fact that strontium sulfide is difficult to obtain now and is the one that has long been preferred, what substance could be used to replace this material? Chicago.

Barium sulfide has long been used as a major ingredient of depilatory preparations, and numerous formulas using it as a chief component are available in the standard texts on the subject. Stannite depilatories have been used but they are not particularly stable. Methods for preparing these salts have been described from time to time, especially in the patent literature. Probably the most important of the newer depilatories is calcium thioglycolate. Most of the preparations utilizing this compound are patented, but the owners of the patents frequently license manufacturers, or sell the material direct.

BUTTER FLAVOR: Can you please advise me concerning the proportions of essential materials used in a butter flavor base? Thank you. Newark.

This is somewhat out of my line, but the following formula for a butter flavor has been given in one of the standard formularies.

Amyl butyrate	2 oz.
Ethyl butyrate	1½ oz.
Butyric acid	2 oz.
Rose essence	2 drops
Bitter almond oil	1 oz.
Sweet almond oil	5 oz.
Nutmeg oil	2 oz.
Walnut oil	1 oz.
Cottonseed oil	1 gal.

QUESTIONS

ANTI-PERSPIRANT: We have been using a formula for a deodorant cream which works out fine for deodorizing but which is not anti-perspirant. Could you suggest a preparation which will serve the double purpose? Toronto.

Perhaps a preparation made along the following lines will serve your purpose:

Sodium lauryl sulfate	**2.0**
Glyceryl monostearate (free from added soap)	**23.5**
Water	**58.5**
Titanium dioxide	**2.0**
Aluminum sulfocarbolate	**5.0**
Aluminum sulfate	**9.0**
Perfume	**sufficient**

Emulsify the first three ingredients by bringing them to a boil and stirring until cool. When cool, slowly add with constant stirring, the remaining ingredients. Allow to set overnight, add perfume and pass through an ointment mill.

LAXATIVE: Several issues back there appeared an article on laxatives excerpted from a book written by a doctor from the Mayo Clinic. Please advise as to the name of the author and the publisher. Hewlett.

The book mentioned on page 624 of the December 1943 issue of DRUG & COSMETIC INDUSTRY is "Nervousness, Indigestion and Pain" by Dr. Walter C. Alvarez. It is published by Paul B. Hoeber, Inc., New York. This book is available from our book department.

SOAPLESS SHAMPOO: My present old-style shampoo is causing me trouble due to a shortage of materials, and I would like to make up a new detergent shampoo. Do you have any suggestions as to formulations or materials? North Hollywood.

A soapless liquid shampoo, as suggested by F. Chilson can be made as follows:

Sulfonated Castor oil (75%)	**63.0%**
Sulfonated olive oil (75%)	**20.0**
White mineral oil, light	**5.0**
Distilled water	**10.0**
Ethylene glycol	**1.5**
Perfume	**0.05**

HORMONE CREAMS: As a subscriber, I would like very much to ask you for some information with regard to the idea of using estrogens or hormones in creams. I realize that there are many types of hormones that might be used in creams. Can you suggest what hormone would be of value in a cream, and supply an experimental formula? Cleveland.

I think you will find the answers to most, if not all of your questions, in the articles appearing in the April and May 1944 issues of our publication.

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RESEARCH BIOCHEMIST. M.D. or Ph.D., vitamins, hormones, large Eastern pharmaceutical firm. Salary commensurate with experience and ability.

PHARMACEUTICAL CHEMIST. Experienced, capable of handling group of 3 or 4 people. Would be in charge of developmental and pharmaceutical research. Salary—$5-6,000.

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PERFUMER. Large manufacturer of Perfume Oils and related products interested in services of good, creative perfumer. No novice need apply. Replies held strictly confidential. Right party can command a good salary. Write Box 592, DRUG & COSMETIC INDUSTRY.

SALES REPRESENTATIVE: Large, responsible manufacturer desires an experienced sales representative, capable of handling a widely fluctuating line of raw materials used principally by wholesale drug and pharmaceutical manufacturers. Territory southeastern states. Salary commensurate with experience and ability. Ample opportunity for energetic, resourceful man desiring permanent connection. State full deatils first letter. Box 600, DRUG & COSMETIC INDUSTRY.

Situations Wanted

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SALES COSMETICS. 2 men available. The New York Medical Exchange, 489 Fifth Ave., New York 17, N. Y.

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SALES and operations executive—Chemical engineer, 20 years in pharmaceutical and allied chemical lines. Entirely familiar with plant and equipment design and function, as well as laboratory procedures. Well experienced in development of new products, promotional selling and training salesmen. Can direct advertising and originate promotional literature. Desires permanent position in aggressive and expanding company, with established business and interested in new lines. Box 598, DRUG & COSMETIC INDUSTRY.

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